



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

BLUE RIDGE REGIONAL OFFICE

901 Russell Drive, Salem, Virginia 24153

(540) 562-6700 FAX (804) 698-4178

www.deq.virginia.gov

Travis A. Voyles
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director
(804) 698-4020

Robert J. Weld
Regional Director

July 7, 2023

Koen Knippenberg
General Manager
Volvo Group North America LLC
4881 Cougar Trail Road
Dublin, VA 24084
Koen.knippenberg@volvo.com

Location: Pulaski County
Registration No.: 20765

Dear Mr. Knippenberg:

Attached is a minor modification to your Title V permit to operate your facility pursuant to 9VAC5 Chapter 80 Article 1 of the Virginia Regulations for the Control and Abatement of Air Pollution. The attached permit will be in effect beginning July 7, 2023.

In the course of evaluating the application and arriving at a final decision to issue this permit, the Department of Environmental Quality (DEQ) deemed the application complete on September 23, 2022, and solicited written public comments by placing a newspaper advertisement in *The Roanoke Times* on May 22, 2023.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and/or civil charges. Please read all permit conditions carefully.

This permit approval to operate shall not relieve Volvo Group North America LLC of the responsibility to comply with all other local, state, and federal permit regulations.

The Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Department within 30 days after this case decision notice was mailed or delivered to you. Please consult the relevant regulations for additional requirements for such requests.

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal of this decision by filing a Notice of Appeal with:

Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit, please contact Blue Ridge Regional Office at 540-562-6700.

Sincerely,

A handwritten signature in blue ink that reads "Paul R. Jenkins".

for Robert J. Weld
Regional Director

Attachment: Permit

cc: Blake Apo, DEQ BRRO Air Permit Writer (*electronic*)
Frank Craighead, DEQ BRRO Air Compliance Inspector (*electronic*)
Nicole Wright, DEQ BRRO Air Compliance (*electronic*)
Margaret Wagner, DEQ BRRO Air Compliance Manager (*electronic*)
Yongtian (Tom) He, PhD, U.S. EPA Region III (he.yongtian@epa.gov)
Maya Whitaker, DEQ Office of Air Permit Programs (OAPP) (*electronic*)
Michele Lawton, Volvo Environmental Coordinator (michele.lawton@volvo.com)



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Federal Operating Permit

Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, 40CFR10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9VAC5-80-50 through 9VAC5-80-300, of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: Volvo Group North America, LLC
Facility Name: New River Valley Plant
Facility Location: 4881 Cougar Trail Road
Dublin, Virginia 24084
Registration Number: 20765
Permit Number: BRRO-20765

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Conditions 1 through 152)

March 25, 2021
Effective Date

July 7, 2023
Modification Date

March 24, 2026
Expiration Date

Paul R. Jenkins
for Robert J. Weld
Regional Director

July 7, 2023
Signature Date

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Attachment 1 – Compliance Assurance Monitoring Plan
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Facility Information

Permittee

Volvo Group North America, LLC
7900 National Service Road
Greensboro, NC 27402

Responsible Official

Koen Knippenberg
General Manager

Facility

Volvo Group North America, LLC
4881 Cougar Trail Road
Dublin, Virginia 24084

Contact Person

Michele Lawton
Environmental Engineer
540-674-7382

Facility Description: NAICS 336211 – Heavy-duty trucks are produced on site in three major production areas; chassis, cab paint shop, and plastic paint shop. The chassis production area assembles and paints the truck chassis and trims the cab from the paint shop. The cab paint shop receives manufactured cabs that are cleaned, pretreated, electrocoated, primed, and coated with a basecoat and clearcoat. The plastic paint shop receives plastic parts that may be sanded, cleaned, and washed in preparation for basecoat and clearcoat paint applications. The facility can produce finished Volvo trucks and painted Mack cabs

Equipment List –

Table A							
Emission Unit ID	Stack ID	Equipment Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Document Date
Chassis Paint Booth (1PE-001)							
1PE-001A	MM.1-7	Chassis Paint Booth	17.5 skids/hr	Water wash spray booth with dry cartridge filters	1PC-01	PM	January 25, 2023
-	-	Chassis Flash	-	-	-	-	January 25, 2023
1PE-001B	NN.1	Chassis Curing Oven (1FBE-002)	17.5 skids/hr	-	-	-	January 25, 2023
1PE-001C	OO.1	Chassis Oven Cooler	17.5 skids/hr	-	-	-	January 25, 2023
CCC Final Repair & Touch Up (13PE-001, -002 & -004)							
13PE-001A	P.1-4	PC Booth # 1: Cab Touch-Up	17.5 skids/hr	Water Wash Spray Booth	13PC-01	PM	January 25, 2023
13PE-001B	P.1-6	PC Booth #1 Oven	17.5 skids/hr	-	-	-	January 25, 2023
13PE-002A	O.1- 2	PC Booth # 2: Cab Touch-Up	17.5 skids/hr	Dry Cartridge Filters	13PC-02	PM	January 25, 2023
13PE-002B	O.3	PC Booth #2 Oven	17.5 skids/hr	-	-	-	January 25, 2023

Table A (Continued)							
Emission Unit ID	Stack ID	Equipment Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Document Date
13PE-004A	Q.1-4	PC Booth #4: Truck Touch-Up	17.5 skids/hr	Dry Cartridge Filters or equivalent	13PE-04	PM	January 25, 2023
13PE-004B	Q.5	PC Booth #4 Oven	17.5 skids/hr	-	-	-	January 25, 2023

Table B							
Emission Unit ID	Stack ID	Equipment Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Document Date
Plastics 5-Stage Washing Process (2PE-002)							
2PE-002A	-	5-Stage Washing Process	-	-	-	-	January 25, 2023
2FBE-002	-	Plastics Washer Boiler	5.5 MMBtu/hr	-	-	-	January 25, 2023
Phosphate/Pretreatment System (2PE-003)							
2PE-003A	-	Phosphate/Pretreatment System	-	-	-	-	January 25, 2023
2FBE-003	PB.1	Pretreatment Boiler #1	17 MMBtu/hr	-	-	-	January 25, 2023
2FBE-004	PB.2	Pretreatment Boiler #2	17 MMBtu/hr	-	-	-	January 25, 2023
Electrocoating (E-Coat) (3PE-002)							
3PE-002A	-	E-Coat Dip Tank	21 skids/hr	-	-	-	January 25, 2023
3PE-002B	-	E-Coat Tunnel	-	-	-	-	January 25, 2023
3PE-002C: 3FBE-001A 3FBE-002 3FBE-003 3FBE-004 3FBE-005	-	E-Coat Oven, Zones 1 - 5 Burners	3 MMBtu/hr 3 MMBtu/hr 3 MMBtu/hr 2 MMBtu/hr 2 MMBtu/hr	RTO	3FBE-006	VOC	January 25, 2023
3PE-002D	-	E-Coat Oven Cooler	-	-	-	-	January 25, 2023
3FBE-006	-	E-Coat Oven RTO	5 MMBtu/hr	-	-	-	January 25, 2023
3FPE-007	-	E-Coat ASH	5 MMBtu/hr	-	-	-	January 25, 2023
3FBE-008	-	E-Coat ASH	5 MMBtu/hr	-	-	-	January 25, 2023
EGEN5 (listed in	EGEN5	Emergency Generator (natural gas-fired)	350 kW (536 bhp)	Three-Way Catalyst	TWC	CO, VOC and NOx	January 25, 2023

Table C also)							
Seam Sealer (4PE-001)							
4PE-001A	-	Seam Sealer/Bracket Attach	-	-	-	-	January 25, 2023
4PE-001B	-	Cab Wipe/Prime Tack-Off	-	-	-	-	January 25, 2023
Seam Sealer (4PE-002)							
4PE-002A	-	Seam Sealer	-	RTO	8FBE-012	VOC	January 25, 2023
4PE-002B	-	Sound Deadening	-	RTO	8FBE-012	VOC	January 25, 2023
4PE-002C: 4FBE-001 4FBE-002 4FBE-003 4FBE-004 4FBE-005	-	Seam Sealer Oven; Zones 1 -5 burners	4 MMBtu/hr 3 MMBtu/hr 2 MMBtu/hr 2 MMBtu/hr 2 MMBtu/hr	Low NOx Burners, RTO	8FBE-012 (RTO)	NOx and VOC	January 25, 2023
4FBE-006	-	RASH LNB	6 MMBtu/hr	Low NOx Burners	-	NOx	January 25, 2023
12FBE-001	-	Air Supply House Heater for Seam Sealer (4PE-002) and Cab Prime (5PE-002)	See 5PE-002	-	-		January 25, 2023

Table B (Continued)							
Emission Unit ID	Stack ID	Equipment Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Document Date
Cab Prime (SPE-002)							

Table B (Continued)							
Emission Unit ID	Stack ID	Equipment Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Document Date
5PE-002A	-	Cab Prime Booth	22 skids/hr	RTO and Venturi Wet Scrubber	9FBE-011	VOC, PM, PM10 and PM2.5	January 25, 2023
5PE-002B	-	Cab Prime Flash	-	RTO	9FBE-011	VOC	January 25, 2023
5PE-002C: 5FPE-004 5FBE-005 5FBE-006 5FBE-007	-	Cab Prime Oven, Zones 1-4 burners	3 MMBtu/hr 3 MMBtu/hr 3 MMBtu/hr 3 MMBtu/hr	RTO	8FBE-012	VOC	January 25, 2023
9FBE-011	-	Cab Prime/Clearcoat RTO	16 MMBtu/hr	-	-	-	January 25, 2023
8FBE-009	-	RASH LNB	2.6 MMBtu/hr	-	-	-	January 25, 2023
8FBE-010	-	RASH LNB	2.6 MMBtu/hr	-	-	-	January 25, 2023
12FBE-001	-	Air Supply House Heater for Cab Prime (5PE-002)	21.1 MMBtu/hr	-	-	-	January 25, 2023
Prep/Sand (6PE-001, 6PE-002, & 6PE-003)							
6PE-001A	-	Prep Booth/Sand Booth	-	Dry Cartridge Filter	-	PM, PM10 & PM2.5	January 25, 2023
6PE-002A	-	Small Sanding Booth	-	HEPA Equivalent Filter	-	PM, PM10 & PM2.5	January 25, 2023
6PE-003A	-	Small Sanding Booth	-	HEPA Equivalent Filter	-	PM, PM10 & PM2.5	January 25, 2023

Table B (Continued)							
Emission Unit ID	Stack ID	Equipment Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Document Date
Plastics Repair (7PE-002)							
7PE-002A	-	Plastics Repair Booth (2 spray guns)	36.39 skids/hr	HEPA Equivalent Filter	-	PM, PM10 & PM2.5	January 25, 2023
7FBE-002	-	Plastics Repair Heater	5 MMBtu/hr	Low NOx Burner	-	NOx	January 25, 2023
Smart Air Repair Systems (7PE-003)							
7PE-003	-	Smart Air Repair Booth 1 (1 spray gun)	36.39 skids/hr	HEPA equivalent Filter	-	PM, PM10 & PM2.5	January 25, 2023
Cab Repair Booth (7PE-008)							
7PE-008A	-	Cab Repair Booth	-	HEPA Equivalent Filter	-	PM, PM10 & PM2.5	January 25, 2023
7PE-008B	-	Cab Repair Oven	-	RTO and HEPA Equivalent Filter	8FBE-012	VOC, PM, PM10 & PM2.5	January 25, 2023
7FBE-012	-	Cab Repair Heater	2 MMBtu/hr	-	-	-	January 25, 2023

Table B (Continued)							
Emission Unit ID	Stack ID	Equipment Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Document Date
Plastics Repair Booth (7PE-009)							
7PE-009A	-	Plastics Repair Booth	-	HEPA Equivalent Filter	-	PM, PM10 & PM2.5	January 25, 2023
7PE-009B	-	Plastics Repair Oven	-	HEPA Equivalent Filter	-	PM, PM10 & PM2.5	January 25, 2023
7FBE-013	-	Plastics Repair Heater	5 MMBtu/hr	Low NOx Burner	-	NOx	January 25, 2023
Multitone (MT)/Basecoat (BC)/Clearcoat (CC) (8PE-002)							
8PE-002A	PPX.3	Multitone/Basecoat/Clearcoat Spray Booth	11.14 skids/hr	Venturi Wet Scrubber, Concentrator & RTO	CONC-001 or CONC-002 & 8FBE-012 (RTO)	PM, PM10, PM2.5 & VOC	January 25, 2023
8PE-002B	BOE.1	Multitone/Basecoat/Clearcoat Flash	11.14 skids/hr	Concentrator & RTO	CONC-001 or CONC-002 & 8FBE-012	VOC	January 25, 2023
8PE-002C: 8FBE-004 8FBE-005 8FBE-006 8FBE-007	QQQ.4	Multitone/Basecoat/Clearcoat Oven, Zones 1, 2, 3A & 3B	3.0 MMBtu/hr 5.0 MMBtu/hr 3.0 MMBtu/hr 3.0 MMBtu/hr	RTO	8FBE-012	VOC	January 25, 2023
8PE-002D	RRR.1	Multitone/Basecoat/Clearcoat	-	-	-	-	January 25, 2023

Table B (Continued)							
Emission Unit ID	Stack ID	Equipment Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Document Date
		arcoat Cooler					
8PE-002E	-	Multitone/Basecoat/Cle arcoat Demask	-	-	-	-	January 25, 2023
18FBE-001	-	Demask Heater	24 MMBtu/hr	-	-	-	January 25, 2023
8FBE-013	-	Concentrator Heater	2 MMBtu/hr	-	-	-	January 25, 2023
14FBE-001	-	Burnham Ind. Boiler – humidity control for 8PE-002	6.32 MMBtu/hr	-	-	-	January 25, 2023
16FBE-001	-	Air Supply House for 8PE-002	12.2 MMBtu/hr	-	-	-	January 25, 2023
8FBE-012	-	Concentrators (CONC-001 & CONC-002) and RTO Shared with 8PE-002A, 8PE-004A and 8PE-004B	16 MMBtu/hr	-	-	-	January 25, 2023
Plastics Basecoat (8PE-003)							
8PE-003A	-	Plastics Basecoat Spray Booth	36.39 skids/hr	Precoated Dry Filter System & RTO	9FBE-010 (RTO)	PM, PM10, PM2.5 & VOC	January 25, 2023
8PE-003B	-	Plastics Basecoat Flash	36.39 skids/hr	RTO	9FBE-010	VOC	January 25, 2023

Table B (Continued)							
Emission Unit ID	Stack ID	Equipment Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Document Date
9FBE-009A (Ash) 9FBE-009B (Reheat)	-	Plastics BC (8PE-003)/Plastics CC (9PE-002) Central Process Air Supply Heater with Reheat burner	10.0 MMBtu/hr (Ash) 3.7 MMBtu/hr (Reheat)	-	-	-	January 25, 2023
9FBE-010	-	Plastics Basecoat(8PE-003)/Clearcoat (9PE-002) RTO	10 MMBtu/hr	-	-	-	January 25, 2023
Lime Silos							
LIME1	-	Virgin Lime Silo for Precoated Dry Filter System	-	Dry Cartridge Filters	-	PM, PM10 & PM2.5	January 25, 2023
LIME2	-	Used Lime Silo for Precoated Dry Filter System	-	Dry Cartridge Filters	-	PM, PM10 & PM2.5	January 25, 2023
Cab Basecoat (8PE-004)							
8PE-004A	-	Cab Basecoat Spray Booth	22 skids/hr	HEPA Equivalent, Concentrator & RTO	CONC-001 or CONC-002 & 8FBE-012	PM, PM10 & PM2.5	January 25, 2023
8PE-004B	-	Cab Basecoat Flash	22 skids/hr	Concentrator & RTO	CONC-001 or CONC-002 & 8FBE-012	VOC	January 25, 2023
8FBE-009	-	Recirculation Air	See 5PE-002	-	-	-	January 25, 2023

Table B (Continued)							
Emission Unit ID	Stack ID	Equipment Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Document Date
8FBE-010		Supply House (RASH)					
8FBE-012	-	Concentrators (CONC-001 & CONC-002) and RTO Shared with 8PE-002A, B & C 8PE-004A & B	See 8PE-002	-	-	-	January 25, 2023
8FBE-013	-	Concentrator Heater	See 8PE-002	-	-	-	January 25, 2023
Cab Clearcoat (9PE-001)							
9PE-001A	SSS.1-2	Cab Clearcoat Spray Booth	22 skids/hr	HEPA Equivalent Filter w/pre-filters & RTO	9FBE-011 (RTO)	PM, PM10, PM2.5 & VOC	January 25, 2023
9PE-001B	-	Cab Clearcoat Flash	22 skids/hr	RTO	9FBE-011	VOC	January 25, 2023
9PE-001 C: 9FBE-001 9FBE-002 9FBE-003	SSS.3 SSS.4 SSS.6	Cab Clearcoat Oven, Zones 1-3 burners	3.43 MMBtu/hr 2.6 MMBtu/hr 4.2 MMBtu/hr	RTO	9FBE-011	VOC	January 25, 2023
9FBE-011 or 3FBE-006	SSS.5	Cab Basecoat/Clearcoat RTO or ECoat/CC RTO	See 5PE-002 or 3PE-002	-	-	-	January 25, 2023
9FBE-004 9FBE-005	-	Air Supply House Heater	2.6 MMBtu/hr 2.6 MMBtu/hr	-	-	-	January 25, 2023
Plastics Clearcoat (9PE-002)							

Table B (Continued)							
Emission Unit ID	Stack ID	Equipment Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Document Date
9PE-002A	-	Plastics Clearcoat Spray Booth	36.39 skids/hr	Precoated Dry Filter System & RTO	9FBE-010 (RTO)	PM, PM10, PM2.5, & VOC	January 25, 2023
9PE-002B	-	Plastics Clearcoat Flash	-	RTO	9FBE-010	VOC	January 25, 2023
9FBE-006 9FBE-007	-	Plastics Clearcoat Oven, Zones 1 and 2 Burners	2.5 MMBtu/hr 2.5 MMBtu/hr	RTO	9FBE-010	VOC	January 25, 2023
9FBE-008	-	Plastics Clearcoat Heater Zone 1	2.5 MMBtu/hr	-	-	-	January 25, 2023
9FBE-009A (Ash) 9FBE-009B (Reheat)	-	Plastics BC (8PE-003)/Plastics CC (9PE-002) Central Process Air Supply Heater with Reheat burner	See 8PE-003	-	-	-	January 25, 2023
9FBE-010	-	Plastics Basecoat (8PE-003)/Clearcoat (9PE-002) RTO	See 8PE-003	-	-	-	January 25, 2023
Spot Repair (10PE-001/-002/-003/-004)							
10PE-001 10PE-002 10PE-003 10PE-004	UUU.1	Spot Repair (BC/CC) Area	36.4 skids/hr	Dry Cartridge Dry Cartridge Dry Cartridge HEPA Equivalent Filter	10PC-01 10PC-02 10PC-03 10PC-04	PM, PM10 & PM2.5	January 25, 2023
Miscellaneous							

Table B (Continued)							
Emission Unit ID	Stack ID	Equipment Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Document Date
3FBE-009	-	BIW ASH	3 MMBtu/hr	-	-	-	January 25, 2023
3FBE-010	-	BIW ASH	3 MMBtu/hr	-	-	-	January 25, 2023
Paint Mix Room	-	Paint Mix Room	-	RTO	8FBE-012	VOC	January 25, 2023

TABLE C							
Emission Unit ID	Stack ID	Equipment Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Document Date
EGEN2	-	Emergency Generator – natural gas-fired	150kW (201 hp)	-	-	-	-
EGEN3	-	Emergency Generator – diesel-fired	150 kW (201 hp)	-	-	-	-
EGEN4	-	Emergency Generator – natural gas-fired	180 kW (240 hp)	-	-	-	-
EGEN5	-	Emergency Generator – natural gas-fired	350 kW (536 hp)	Three-Way Catalyst	TWC5	CO, VOC, and NOx-	January 25, 2023
EGEN6	-	Emergency Generator – natural gas-fired	80 kW (132 hp)	Three-Way Catalyst	TWC6	CO, VOC, and NOx	-
RBT	-	Robotic Paint Spray Booth	22.2 gal/hr	Fiberglass Filters	-	PM, PM10 & PM2.5	April 6, 2012

*Specifications included in the above tables are for informational purposes only and do not form enforceable terms or conditions of the permit.

PROCESS EQUIPMENT REQUIREMENTS

1. **Emission Controls (2FBE-002/-003/-004, 3PE-001A/-002/-003/-004/-005, 3FBE-006/-007/-008/-009/-010, 4FBE-001/-002/-003/-004/-005/-006, 5FBE-004/-005/-006/-007/-009/-010, 7FBE-002/-012/-013, 8FBE-004/-005/-006/-007/-009/-010/-013/-012/-014/-015, 9FBE-001/-002/-003/-004/-005/-006/-007/-008/-009A/-009B/-010/-011, 12FBE-001, 14FBE-001, 18FBE-001)** – NOx emissions from the following equipment shall be controlled by low NOx burners:

Plastics 5-Stage Washing Process (2PE-002)

Plastics Washer Boiler	2FBE-002
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Phosphate/Pretreatment System (2PE-003)

Pretreatment Boiler #1	2FBE-003
Pretreatment Boiler #2	2FBE-004

Electrocoating (3PE-002)

Electrocoating Oven Zone 1 Burner	3PE-001A
Electrocoating Oven Zone 2 Burner	3PE-002
Electrocoating Oven Zone 3 Burner	3PE-003
Electrocoating Oven Zone 4 Burner	3PE-004
Electrocoating Oven Zone 5 Burner	3PE-005
E-Coat ASH	3FBE-007
E-Coat ASH	3FBE-008

BIW Plant 1

BIW Plant 1 ASH	3FBE-009
BIW Plant 1 ASH	3FBE-010

Seam Sealer (4PE-002)

Seam Sealer Oven Zone 1 Burner	4FBE-001
Seam Sealer Oven Zone 2 Burner	4FBE-002
Seam Sealer Oven Zone 3 Burner	4FBE-003
Seam Sealer Oven Zone 4 Burner	4FBE-004
Seam Sealer Oven Zone 5 Burner	4FBE-005
RASH LNB	4FBE-006

Cab Prime (5PE-002)

Cab Prime Oven Burner Zone 1	5FBE-004
Cab Prime Oven Burner Zone 2	5FBE-005
Cab Prime Oven Burner Zone 3	5FBE-006
Cab Prime Oven Burner Zone 4	5FBE-007
RASH LNB	8FBE-009
RASH LNB	8FBE-010

Plastics Repair (7PE-002)

Air Heater

7FBE-002

Cab Repair Booth (7PE-008)

Cab Repair Booth Heater

7FBE-012

Cab Repair Booth (7PE-009)

Plastics Repair Heater

7FBE-013

Multitone/Basecoat/Clearcoat Booth (8PE-002)

Oven Burner Zone 1

8FBE-004

Oven Burner Zone 2

8FBE-005

Oven Burner Zone 3A

8FBE-006

Oven Burner Zone 3B

8FBE-007

Boiler for Humidity Control

14FBE-001

MT/BC/CC ASH

16FBE-001

Concentrator Heater

8FBE-013 (shared with 8PE-004)

Demask Heater

18FBE-001

Plastics Basecoat (8PE-003)

Central Process ASH (shared with 9PE-002)
with Reheat burner

9FBE-009A

9FBE-009B

Cab Basecoat (8PE-004)

Concentrator Heater

8FBE-013 (shared with 8PE-002)

Cab BC (RASH)

8FBE-014 and 8FBE-015

Cab Clearcoat (9PE-001)

Oven Burner Zone 1

9FBE-001

Oven Burner Zone 2

9FBE-002

Oven Burner Zone 3

9FBE-003

RASH LNB

9FBE-004

RASH LNB

9FBE-005

Plastics Clearcoat (9PE-002)

Oven Burner Zone 1

9FBE-006

Oven Burner Zone 2

9FBE-007

Heater Zone 1

9FBE-008

Central Process ASH

9FBE-009

Regenerative Thermal Oxidizers

E-coat/Cab Clearcoat RTO

3FBE-006

MT/BC/CC & Cab Basecoat RTO

8FBE-012

Plastic Basecoat/Clearcoat RTO

9FBE-010

Cab Prime/Clearcoat RTO

9FBE-011

The control devices shall be provided with adequate access for inspection and shall be in operation when the processes are operating.
 (9VAC5-80-110 and Condition 1 of the January 25, 2023 Permit Document)

2. **Emission Controls and Control Requirements (1PE-001, 13PE-001/-002/-004) -**
 Particulate emissions from paint spray booths shall be controlled as tabulated below, or DEQ approved equivalent, to achieve the designated concentrations:

<u>Paint/Coating Process</u>		<u>Control Equipment</u>	<u>Control</u>
Chassis	1PE-001A	Water Wash Spray Booth with dry cartridge filters	0.005 gr/scf
P-C Cab Repair/Touch-Up	13PE-001A	Water Wash Spray Booth	0.005 gr/scf
P-C Cab Repair/Touch-Up	13PE-002A	Dry Cartridge Filter	0.005 gr/scf
P-C Cab Repair/Touch-Up	13PE-004A	Dry Cartridge Filter or equivalent	0.005 gr/scf

The over-spray particulate controls for the paint spray booths shall be provided with adequate access for inspection.
 (9VAC5-80-110 and Condition 2 of the January 25, 2023 Permit Document)

3. **Emission Controls and Control Requirements (5PE-002, 6PE-001/-002/-003, 7PE-002, 7PE-003, 7PE-008, 7PE-009, 8PE-002/-003/-004, LIME1, LIME2, 9PE-001/-002, 10PE-001/-002/-003/-004) – PM, PM10 and PM2.5 emissions from the following paint spray booths shall be controlled as listed below. The control device control efficiency shall be demonstrated by vendor information approved by DEQ showing the rated control efficiency, or alternative documentation, as approved by DEQ. The control devices shall be provided with adequate access for inspection and shall be in operation when the processes are operating.**

<u>Paint/Coating Process</u>		<u>Control Equipment</u>	<u>Control</u>
Cab Prime	5PE-002A	Venturi Wet Scrubber	0.0027 gr/scf
Prep/Sand Booth	6PE-001A	Dry Cartridge Filter	0.005 gr/scf
Small Sanding Booth	6PE-002	HEPA Equivalent Filter	0.0001 gr/scf
Small Sanding Booth	6PE-003	HEPA Equivalent Filter	0.0001 gr/scf
Plastics Repair	7PE-002	HEPA Equivalent Filter	0.0001 gr/scf
Smart Air Repair Booth	7PE-003	HEPA Equivalent Filter	0.0001 gr/scf
Cab Repair Booth	7PE-008A&B	HEPA Equivalent Filter	0.0001 gr/scf
Plastic Repair Booth	7PE-009A&B	HEPA Equivalent Filter	0.0001 gr/scf
MT/BC/CC	8PE-002A	Venturi Wet Scrubber	0.003 gr/scf
Plastics Basecoat	8PE-003A	Precoated Dry Filter System	0.0001 gr/scf
Cab Basecoat	8PE-004A	HEPA Equivalent Filter w/pre-filters	0.0001 gr/scf
Virgin Lime Silos	LIME1	Dry Cartridge Filter	0.001 gr/scf
Used Lime Silos	LIME2	Dry Cartridge Filter	0.001 gr/scf
Cab Clearcoat	9PE-001A	HEPA Equivalent Filter w/pre-filters	0.0001 gr/scf
Plastics Clearcoat	9PE-002A	Precoated Dry Filter System	0.0001 gr/scf

Spot Repair (BC/CC)	10PE-001	Dry Cartridge Filter	0.005 gr/scf
Spot Repair (BC/CC)	10PE-002	Dry Cartridge Filter	0.005 gr/scf
Spot Repair (BC/CC)	10PE-003	Dry Cartridge Filter	0.005 gr/scf
Spot Repair (BC/CC)	10PE-004	HEPA Equivalent Filter	0.0001 gr/scf

(9VAC5-80-110 and Condition 3 of the January 25, 2023 Permit Document)

4. **Emission Controls (1PE-001)** - Volatile organic compound (VOC) emissions from the following painting/coating processes shall be controlled by the use of waterborne, high-solids coatings, zero-VOC solvent borne coatings, or DEQ approved equivalent:

Chassis	1PE-001
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(9VAC5-80-110 and Condition 4 of the January 25, 2023 Permit Document)

5. **Emission Controls (3PE-001)** - Volatile organic compound (VOC) emissions from the electro-deposition (E-coat immersion) process (3PE-001) shall be controlled by the use of electrodeposited waterborne coatings.
 (9VAC5-80-110 and Condition 5 of the January 25, 2023 Permit Document)

6. **Permanent Shutdown (2PE-001)** – Upon the startup of the Phosphate/Pretreatment System (2PE-003), the Assembly/Washing System (2PE-001) shall permanently cease operation. Restarting 2PE-001 shall be considered a physical change or change in the method of operation at the facility.
 (9VAC5-80-110 and Condition 6 of the January 25, 2023 Permit Document)

7. **Permanent Shutdown (3PE-001)** – Upon the startup of the Electrocoating process (3PE-002), the E-Coat process (3PE-001) shall permanently cease operation. Restarting 3PE-001 shall be considered a physical change or change in the method of operation at the facility.
 (9VAC5-80-110 and Condition 7 of the January 25, 2023 Permit Document)

8. **Permanent Shutdown** – Upon startup of the Seam Sealer (4PE-002), the Seam Sealer (4PE-001) shall permanently cease operation. Restarting operation of 4PE-001 shall be considered a physical change or change in the method of operation at the facility.
 (9VAC5-80-110 and Condition 8 of the January 25, 2023 Permit Document)

9. **Emission Controls (3PE-002)** - Volatile organic compound (VOC) emissions from the Electrocoating process (3PE-002) shall be controlled by the use of electrodeposited waterborne coatings.
 (9VAC5-80-110 and Condition 9 of the January 25, 2023 Permit Document)

10. **Emission Controls (8PE-003A/-003B, 9PE-001A/-001B/-001C, 9PE-002A/-002B/-002C)** - Volatile organic compound (VOC) emissions from the Cab Clearcoat (9PE-001A/-001B/-001C) spray booths shall be controlled by air recirculation to concentrate VOCs inside the booth followed by a regenerative thermal oxidizer (RTO) (9FBE-011) or RTO (3FBE-006)

and VOC emissions from the Plastics Basecoat (8PE-003A/-003B) & Plastics Clearcoat (9PE-002A/-002B/-002C) spray booths shall be controlled by air recirculation to concentrate VOCs inside the booths followed by a RTO (9FBE-010). The air recirculation systems and oxidizer shall be provided with adequate access for inspection and shall be in operation when the emission units that it controls are operating. The minimum combustion chamber temperature for RTOs (9FBE-010 and 9FBE-011) shall be maintained such that the rolling three-hour average combustion chamber temperature is equal to or greater than the minimum temperature derived from the most recent DEQ approved performance test that demonstrates compliance with this permit.

(9VAC5-80-110 and Condition 10 of the January 25, 2023 Permit Document)

11. **Emission Controls (5PE-002A/-002B, 3PE-002C)** - Volatile organic compound (VOC) emissions from the Cab Prime Booth/Flash (5PE-002A/-002B) shall be controlled by a regenerative thermal oxidizer (RTO) (9FBE-011). VOC emissions from the E-Coat ovens (3PE-002C) shall be controlled by RTO (3FBE-006). The RTOs shall be provided with adequate access for inspection and shall be in operation when the emission unit that it controls is operating. The RTO (9FBE-011) and the RTO (3FBE-006) shall each operate such that the rolling three-hour average combustion chamber temperature is equal to or greater than the minimum temperature derived from the most recent DEQ approved performance test that demonstrates compliance with this permit.
(9VAC5-80-110 and Condition 11 of the January 25, 2023 Permit Document)
12. **Emission Controls (4PE-002A/-002B/-002C, 8PE-002A/-002B/-002C, 8PE-004A/-004B, 5PE-002C, 7PE-008B)** - Volatile organic compound (VOC) emissions from the, MT/BC/CC spray booth and flash (8PE-002A/-002B) and the Cab Basecoat spray booth and flash (8PE-004A/-004B) shall be controlled by a concentrator (CONC-001 or CONC-002) and a regenerative thermal oxidizer (RTO) (8FBE-012). VOC emissions from the Seam Sealer (4PE-002A/-002B/-002C), Cab Prime Oven (5PE-002C), Cab Repair Oven (7PE-008B), MT/BC/CC Oven (8PE-002C), and Paint Mix Room shall be controlled by RTO (8FBE-012). The concentrators and RTO shall be provided with adequate access for inspection and shall be in operation when the emission unit that it controls is operating. Each concentrator shall operate such that the three-hour average desorption gas inlet temperature is equal to or greater than the desorption gas inlet temperature derived from the most recent performance test that demonstrates compliance. The RTO (8FBE-012) shall operate such that the rolling three-hour average combustion chamber temperature is equal to or greater than the minimum combustion chamber temperature derived from the most recent DEQ approved performance test that demonstrates compliance with this permit.
(9VAC5-80-110 and Condition 12 of the January 25, 2023 Permit Document)
13. **Control Efficiency (3FBE-006, 8FBE-012, 9FBE-010/-011)** – The RTO (9FBE-011) controlling emissions from Cab Prime (5PE-002A/-002B) and Cab Clearcoat (9PE-001A/-001B/-001C), the RTO (9FBE-010) controlling emissions from Plastics Basecoat (8PE-003A/-003B) & Plastics Clearcoat (9PE-002A/-002B/-002C), the RTO (3FBE-006) controlling emissions from E-Coat Oven (3PE-002C) and Cab Clearcoat (9PE-001A/-001B/-001C), and the RTO (8FBE-012) controlling emissions from the Seam Sealer (4PE-

002), Cab Prime Oven (5PE-002C), Cab Repair Oven (7PE-008B), MT/BC/CC spray booth and flash (8PE-002A/-002B) and the Cab Basecoat spray booth and flash (8PE-004A/-004B) shall each maintain a control efficiency for VOC of no less than 95%, to be demonstrated by stack test.

(9VAC5-80-110 and Condition 15 of the January 25, 2023 Permit Document)

14. **Emission Controls (EGEN5)** - The permittee must comply with the emission standards applicable to the Emergency Generator (EGEN5) specified in 40 CFR 60.4233(e) by purchasing an engine certified to the emission standards specified in 40 CFR 60.4233(e) for the same engine class and maximum engine power.
(9VAC5-80-110 and Condition 13 of the January 25, 2023 Permit Document)
15. **Emission Controls (EGEN5)** - Volatile organic compound (VOC) emissions from the Emergency Generator (EGEN5) shall be controlled by a three-way catalyst (non-selective catalytic reduction). The three-way catalyst shall be provided with adequate access for inspection and shall be in operation when the emission unit that it controls is operating.
(9VAC5-80-110 and Condition 14 of the January 25, 2023 Permit Document)
16. **Requirements by Reference** - Except where this permit is more restrictive than the applicable requirement, the Emergency Engine (EGEN5) shall be operated in compliance with the requirements of 40 CFR Part 60, Subpart JJJJ.
(9VAC5-80-110 and Condition 32 of the January 25, 2023 Permit Document)
17. **Emission Controls (1PE-001 and 13PE-001/-002/-004)** – The volatile organic content of coatings used in the Chassis Paint Booth (1PE-001) and CCC Final Repair & Touch Up (13PE-001/-002/-004) are limited to 3.5 lbs/gal of coating as applied as a monthly average and as a consecutive twelve (12) month average. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9VAC5-80-110 and Condition 16 of the January 25, 2023 Permit Document)
18. **Emission Controls (5PE-002, 7PE-002/-003/-008, 8PE-002/-003/-004, 9PE-001/-002, 10PE-001/-002/-003/-004)** – The volatile organic content of coatings in the Cab Prime (5PE-002), Plastics Repair (7PE-002), Cab Repair Booth (7PE-008), MT/BC/CC (8PE-002), Plastics Basecoat (8PE-003), Cab Basecoat (8PE-004), Cab Clearcoat (9PE-001), Plastics Clearcoat (9PE-002), Spot Repair (10PE-001/-002/-003/-004), and Smart Air Repair System (7PE-003) are limited to 3.5 lbs/gal of coating as applied as a monthly average.
(9VAC5-80-110 and Condition 17 of the January 25, 2023 Permit Document)
19. **Emission Controls (5PE-002, 7PE-002/-003, 8PE-002/-003/-004, 9PE-001/-002, 10PE-001/-002/-003/-004)** – The solids content of coatings applied in the Plastics Repair (7PE-002), MT/BC/CC (8PE-002), Plastics Basecoat (8PE-003), Cab Basecoat (8PE-004), Cab Clearcoat (9PE-001), Plastics Clearcoat (9PE-002), Spot Repair (10PE-001/-002/-003/-004), and Smart Air Repair Systems (7PE-003) are limited to a minimum of 52.5% by

weight (per gallon) as applied as a monthly average. The solids content of the coatings applied in the Cab Prime (5PE-002) are limited to a minimum of 42% by weight (per gallon) as applied as a monthly average.

(9VAC5-80-110 and Condition 18 of the January 25, 2023 Permit Document)

20. **Emission Controls and Monitoring (3PE-002C, 4PE-002, 5PE-002A/-002B, 7PE-008B, 8PE-002A/-002B/-002C, 8PE-003A/-003B, 8PE-004A/-004B, 9PE-001A/-001B, 9PE-002A/-002B)** – The following emission units shall have 95% capture efficiency: 3PE-002C, 4PE-002, 5PE-002A/-002B, 7PE-008B, 8PE-003A/-003B, 9PE-001A/-001B, and 9PE-002A/-002B. The emission units 8PE-002A/-002B and 8PE-004A/-004B shall have 93% capture efficiency when controlled by a Concentrator (CONC-001/-002) and RTO 8FBE-012. The emission unit 8PE-002C shall have 95% capture efficiency when controlled by RTO 8FBE-012. The permittee shall conduct monitoring in accordance with a monitoring plan that shall address the elements below:

- a. The plan must identify the operating parameter(s) to be monitored to ensure capture efficiency measured during the initial compliance demonstration is maintained, explain why this parameter is appropriate for demonstrating compliance, and identify the specific monitoring procedures;
- b. The plan shall establish operating limits or range of values. The operating conditions must represent the conditions indicative of proper operation and maintenance of the capture system;
- c. You must conduct monitoring in accordance with the plan;
- d. Any deviation from the required operating parameters will be considered a deviation from the operating limits.

(9VAC5-80-110 and Condition 19 of the January 25, 2023 Permit Document)

21. **Monitoring Devices (1PE-001)** - The Chassis (1PE-001) spray booth shall be equipped with a differential pressure gauge to continuously measure the differential pressure across the water curtain. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the spray booth is operating.

(9VAC5-80-110 and Condition 20 of the January 25, 2023 Permit Document)

22. **Monitoring Devices (5PE-002, 6PE-001/-002/-003, 7PE-002/-003/-008/-009, 8PE-002/-003/-004, 9PE-001/-002, 10PE-001/-002/-003/-004, LIME1, LIME2)** - The Cab Prime (5PE-002), Prep/Sand (6PE-001/-002/-003), Plastics Repair (7PE-002), Cab Repair Booth (7PE-008), Plastics Repair Booth (7PE-009), MT/BC/CC (8PE-002), Plastics Basecoat (8PE-003), Cab Basecoat (8PE-004), Cab Clearcoat (9PE-001), Plastics Clearcoat (9PE-

002) spray booths, Spot Repair (10PE-001/-002/-003/-004), the Virgin (LIME1) and Used (LIME2) Lime Silos, and Smart Air Repair System (7PE-003) shall be equipped with differential pressure gauges to continuously measure the differential pressure across the venturi wet scrubbers, Precoated Dry Filter Systems, Dry Cartridge Filters and HEPA Equivalent filters and gauges to measure the pressure of the water feed to each venturi wet scrubber. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the equipment is operating.

(9VAC5-80-110 and Condition 21 of the January 25, 2023 Permit Document)

23. **Monitoring Devices (4PE-002, 5PE-002, 7PE-008B, 8PE-002/-003/-004, 9PE-001/-002)** – The Seam Sealer (4PE-002), Cab Prime (5PE-002), Cab Repair Oven (7PE-008B), MT/BC/CC (8PE-002), Plastics Basecoat (8PE-003), Cab Basecoat (8PE-004), Cab Clearcoat (9PE-001), and Plastics Clearcoat (9PE-002) shall be equipped with differential pressure gauges to continuously measure the differential pressure between the emission unit and the building air outside the booth and to measure the differential pressure across the recirculation air filters. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the spray booth is operating.
(9VAC5-80-110 and Condition 22 of the January 25, 2023 Permit Document)

24. **Monitoring Devices (CONC-001/-002)** – The Concentrators (CONC-001, CONC-002) required by Condition 12 shall each be equipped with a device to continuously measure and record the desorption gas inlet temperature. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the concentrators are operating.
(9VAC5-80-110 and Condition 23 of the January 25, 2023 Permit Document)

25. **Monitoring Device Observation (6PE-001/-002/-003, 7PE-002, 8PE-002/-003, 9PE-001/-002, 10PE-001/-002/-003/-004, LIME1, LIME2) - Monitoring Device Observation** - To ensure good performance, the monitoring devices listed in Conditions 21-24 used to continuously measure the pressure drop across the scrubbers/filters listed in Conditions 22 and 23, the water pressure gauges listed in Condition 21 and the desorption gas inlet temperature listed in Condition 24 shall be observed by the permittee with a frequency of not less than once per shift. The permittee shall keep a log of the observations or continuously record measurements from the differential pressure gauges, water pressure gauges, and desorption gas inlet temperature.
(9VAC5-80-110 and Condition 24 of the January 25, 2023 Permit Document)

26. **Monitoring Devices (3FBE-006, 8FBE-012, 9FBE-010/-011)** – Each regenerative thermal oxidizer (RTO) required by Conditions 10, 11, and 12 shall be equipped with a device to continuously measure (at least one reading every 15 minutes) and record the combustion chamber temperature. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the regenerative thermal oxidizer is operating.
(9VAC5-80-110 and Condition 25 of the January 25, 2023 Permit Document)
27. **Monitoring Devices (3FBE-001) – Incinerator** – The incinerator (3FBE-001) that controls VOC and Odor from the E-Coat Oven (3PE-001C) shall be equipped with a device to continuously measure (at least one reading every 15 minutes) and record the combustion chamber temperature. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the regenerative thermal oxidizer is operating.
(9VAC5-80-110 and 9VAC5-80-110 E & K)
28. **Emission Controls – (RBT)** – Particulate emissions from the spray booth (RBT) shall be controlled by fiberglass filters or equivalent filters acceptable to the DEQ. The filters shall be provided with adequate access for inspection and shall be in operation when the spray booth is operating.
(9VAC5-80-110 and Condition 2 of the April 6, 2012 Permit Document)
29. **Monitoring Devices – (RBT)** - The spray booth (RBT) shall be equipped with devices to continuously measure the differential pressure across the filters. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the spray booth is operating.
(9VAC5-80-110 and Condition 4 of the April 6, 2012 Permit Document)
30. **Monitoring Device Observation – (RBT)** - To ensure good performance, the monitoring device used to continuously measure the differential pressure across the filters shall be observed by the permittee with a frequency of not less than once per shift that the spray booth operates. The permittee shall keep a log of the observations or continuously record measurements from the monitoring device.
(9VAC5-80-110 and Condition 5 of the April 6, 2012 Permit Document)
31. **Maintenance/Operating Procedures – (RBT)** – At all times including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- b. Maintain an inventory of spare parts.
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
(9VAC5-80-110 and Condition 16 of the April 6, 2012 Permit Document)

OPERATING LIMITS

32. **Throughput - (RBT)** – The throughput of coating materials used in the spray booth (RBT) shall not exceed 175 gallons per year, calculated monthly as the sum of the consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9VAC5-80-110 and Condition 7 of the April 6, 2012 Permit Document)
33. **Requirements by Reference (RBT)** – Except where this permit is more restrictive than the applicable requirement, the MACT equipment as described in Condition 1 shall be operated in compliance with the requirements of 40 CFR 63, Subparts Mmmm and Pppp.
(9VAC5-80-110 and Condition 8 of the April 6, 2012 Permit Document)
34. **Throughput – (1PE-001/-001A/-001B, 13PE-001/-001A/-002/-002A/-004/-004A)** -- The volatile organic compound consumption from the operation of the equipment in Equipment List Table A shall not exceed 105.8 tons per year, calculated monthly as the sum of the previous consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9VAC5-80-110 and Condition 26 of the January 25, 2023 Permit Document)

35. **Throughput – (3PE-001, 7PE-002, 8PE-002/-003, 9PE-001/-002, 10PE-001/-002/-003/-004)** - The throughput of volatile organic compounds from the operation of 3PE-001, 8PE-002, 8PE-003, 9PE-001 and 9PE-002 shall not exceed 1,329 tons per year. The throughput of volatile organic compounds from the operation of the remaining equipment in Table B (including 7PE-002, 10PE-001/-002/-003/-004, purge, miscellaneous operations and mixing room) shall not exceed 601.5 tons per year. The throughputs shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9VAC5-80-110 and Condition 27 of the January 25, 2023 Permit Document)
36. **Hours of Operation – (Equipment List Table B)** – The cab painting department (emission units listed in the Equipment List Table B) is limited to 6,264 hours of operation per year. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9VAC5-80-110 and Condition 54 of the January 25, 2023 Permit Document)

EMISSION LIMITS

37. **Process Emission Limits (1PE-001/-001A/-001B, 13PE-001/-001A/-002/-002A/-004/-004A)** - Emissions from the operation of the equipment in Equipment List Table A shall not exceed the limit specified below:

Volatile Organic Compounds	105.8 tons/yr
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Annual emissions calculated monthly as the sum of the previous consecutive 12-month period.

(9VAC5-80-110 and Condition 33 of the January 25, 2023 Permit Document)

38. **Process Emission Limits (Equipment List Table B)** - Emissions from the operation of the process equipment in Equipment List Table B and all miscellaneous sources (including purge losses and paint mix room emissions) shall not exceed the limit specified below:

Volatile Organic Compounds	822.53 tons/yr
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These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these limits may be determined as stated in Conditions 5, 9-12, 14, 18, 20, 35, and 52.

(9VAC5-80-110 and Condition 34 of the January 25, 2023 Permit Document)

39. **Process Emission Limits - (1PE-001, 13PE-001/-002/-004)** – Particulate emissions from the operation of truck painting/coating shall not exceed the limits specified below:

<u>Spray Booth</u>	<u>Limit</u>
Chassis Spray (1PE-001)	8.5 tons/yr

CCC Final Repair & Touch Up (Combined) (13PE-001/-002/-004)	8.8 tons/yr
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Annual emissions calculated monthly as the sum of the previous consecutive 12-month period.
(9VAC5-80-110 and Condition 35 of the January 25, 2023 Permit Document)

40. **Process Emission Limits (5PE-002, 6PE-001, 8PE-002/-003/-004, 9PE-001, 10PE-001/-002/-003/-004)** - Emissions from the operation of the following equipment in Table B shall not exceed the limit specified below:

	<u>PM</u>	<u>PM-10</u>	<u>PM-2.5</u>
Cab Prime (5PE-002)	3.4 tons/yr	3.4 tons/yr	3.4 tons/yr
Prep/Sand Booth (6PE-001)	1.5 tons/yr	1.5 tons/yr	1.5 tons/yr
MT/BC/CC (8PE-002)	4.5 tons/yr	4.5 tons/yr	4.5 tons/yr
Plastics Basecoat (8PE-003)	0.3 tons/yr	0.3 tons/yr	0.3 tons/yr
Cab Basecoat (8PE-004)	0.1 tons/yr	0.1 tons/yr	0.1 tons/yr
Cab Clearcoat (9PE-001)	0.1 tons/yr	0.1 tons/yr	0.1 tons/yr
Plastics Clearcoat (9PE-002)	0.1 tons/yr	0.1 tons/yr	0.1 tons/yr
Spot Repair Booths (Combined) (10PE-001/-002/-003/-004)	6.8 tons/yr	6.8 tons/yr	6.8 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these limits may be determined as stated in Conditions 3, 19, and 52.
(9VAC5-80-110 and Condition 36 of the January 25, 2023 Permit Document)

41. **Process Emission Limits (8PE-002/-003/, 9PE-002)** – Emissions from the operation of the following equipment in the Equipment List Table B shall not exceed the limits specified below:

	<u>CO</u>	<u>NOx</u>
MT/BC/CC (8PE-002)	11.1 lbs/hr	6.8 lbs/hr

Plastics BC and Plastics CC (8PE-003 and 9PE-002)	4.4 lbs/hr	5.2 lbs/hr
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These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these limits may be determined as stated in Conditions 52 and 99.

(9VAC5-80-110 and Condition 37 of the January 25, 2023 Permit Document)

42. **Process Emission Limits (8PE-004, 9PE-001)** – Upon the startup of Cab Basecoat (8PE-004), emissions from the operation of the following equipment shall not exceed the limits specified below:

	<u>CO</u>	<u>NOx</u>
Cab Basecoat and Cab Clearcoat (8PE-004 and 9PE-001)	2.7 lbs/hr	3.2 lbs/hr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these limits may be determined as stated in Conditions 52 and 99.

(9VAC5-80-110 and Condition 38 of the January 25, 2023 Permit Document)

Conditions 43, 44, and 45 shall become effective and Conditions 35, 36, and 38 shall become obsolete once all of the following emission units are started up: 2PE-003, 3PE-002, 4PE-002, 5PE-002, and 8PE-004.

43. **Throughput (Equipment List Table B)** - The throughput of volatile organic compounds from the operation of the equipment in Table B (including purge, miscellaneous operations and mixing room) shall not exceed 1,277.2 tons per year. The throughputs shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9VAC5-80-110 and Condition 59 of the January 25, 2023 Permit Document)

44. **Process Emission Limits (Equipment List Table B)** - Emissions from the operation of the process equipment in Table B Equipment List and all miscellaneous sources (including purge losses and paint mix room emissions) shall not exceed the limit specified below:

Volatile Organic Compounds	822.53 tons/yr
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These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these limits may be determined as stated in Conditions 4 -12, 13-15, 17-20, 22, and 52.

(9VAC5-80-110 and Condition 60 of the January 25, 2023 Permit Document)

45. **Hours of Operation (Equipment List Table B)** – The emission units listed in Equipment List Table B are limited to 7,880 hours of operation per year. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9VAC5-80-110 and Condition 61 of the January 25, 2023 Permit Document)
46. **Visible Emission Limit – (RBT)** – Visible emissions from the spray booth (RBT) shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except for startup, shutdown, and malfunction.
(9VAC5-80-110 and Condition 9 of the April 6, 2012 Permit Document)
47. **Visible Emission Limit** - Visible emissions from the facility spray booths, ovens, Emergency Generator (EGEN5) and incinerators shall not exceed five (5) percent opacity, except for one six-minute period in any one hour of not more than ten (10) percent, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). The opacity standard shall apply at all times, except during periods of malfunction, start up, and shut down.
(9VAC5-80-110 and Condition 57 of the January 25, 2023 Permit Document)
48. **Visible Emission Limit - (EGEN3)** - Visible emissions from the diesel-fired emergency generator (EGEN3) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity. The opacity standards for the engine apply at all times except during periods of startup, shutdown and malfunction.
(9VAC5-50-20, 9VAC5-50-80 and 9VAC5-80-110)
49. **Visible Emission Evaluation – (EGEN3) – Monitoring** - At least one time in any week the diesel fired emergency generator (EGEN3) operates an observation of the presence of visible emissions from the operating engine(s) shall be made. The presence of visible emissions shall require the permittee to:
- Take timely corrective action such that the unit resumes operation with no visible emissions, or,
 - Conduct a visible emission evaluation (VEE), in accordance with EPA Method 9 (reference 40 CFR 60 Appendix A) for a minimum of six minutes, to assure visible emissions from the affected unit are 20 percent opacity or less. If any of the 15-second observations exceeds 20 percent opacity, the observation period shall continue for a total of sixty (60) minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the equipment resumes operation with visible emissions less than or equal to the opacity limits.

The permittee shall maintain an observation log to demonstrate compliance. The logs shall include the date and time of the observations, whether or not there were visible emissions

the results of all VEEs, any necessary corrective action, and the name of the observer. If the engine has not been operated for the entire week, it shall be noted in the log book. (9VAC5-50-20 E, 9VAC5-80-110 E and K)

50. **Visible Emission Evaluations (1PE-001, 13PE-001/-002/-004, 5PE-002, 6PE-001/-002/-003, 7PE-002, 7PE-003, 7PE-008, 7PE-009, 8PE-002/-003/-004, LIME1, LIME2, 9PE-001/-002, 10PE-001/-002/-003/-004) – Monitoring** – Observations for the presence of visible emissions shall be made on the spray booths referenced in Conditions 2 and 3 once per calendar week in which the emission unit operates. The presence of visible emissions shall require the permittee to:
- take timely corrective action such that the spray booth(s) resume operation with no visible emissions, or,
 - conduct a visible emission evaluation (VEE) on the spray booth(s) in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions from the spray booth(s) is 5% opacity or less. If any of the observations exceed 5% opacity, the observation period shall continue until a total of sixty (60) minutes of observation have been completed. Timely corrective action shall be taken, if necessary, such that the spray booth(s) resume operation within the 5% opacity limit.

The permittee shall maintain a visible emissions observation log for the spray booth stacks to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action, and the name of the observer. If a spray booth had not been operated for an entire day, it shall be noted in the log book. (9VAC5-80-110 E and 9VAC5-80-110 K)

RECORDS AND REPORTING

51. **On Site Records – Equipment List Table A** - The permittee shall develop a data base record keeping system, or equivalent methodology acceptable to the Department, to maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit (Table A Emission Units). VOC emissions should not include the amount of VOC that is not emitted due to VOC incineration emissions controls, VOC returned to vendor, VOC removed for off-site disposal, etc. Separate records shall be kept for each emissions unit. The content of and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:
- Monthly and annual consumption of VOC for each emissions unit in the Equipment List Table A. Annual consumption and throughput shall be calculated monthly as the sum of the previous consecutive 12-month period.

- b. Monthly and annual consumption of gallons of paints/coatings for each emissions unit in the Equipment List Table A. The waterborne/ exempt solvent paints/coatings shall be reported on both bases of with water and exempt solvent and less water and exempt solvents. Annual consumption shall be calculated monthly as the sum of the previous consecutive 12-month period.
- c. Monthly and annual throughput of skids for the emission units in the Equipment List Table A. Annual throughput shall be calculated monthly as the sum of the previous consecutive 12-month period.
- d. Monthly and annual emissions of particulate matter from each spray booth or set of booths with limits in Condition 39.
- e. Monthly and annual emissions of VOC from equipment in the Equipment List Table A to verify compliance with the emission limitations in Condition 37. Annual emissions shall be calculated monthly as the sum of the previous consecutive 12-month period.
- f. Average monthly and annual VOC content of coatings in pounds/gallon as an average from the emission units in Condition 14 accounting for waterborne/exempt solvent paints/coatings on both bases of with water and exempt solvents and less water and exempt solvents. Annual emissions shall be calculated monthly as the sum of the previous consecutive 12-month period.
- g. Records of the differential pressure readings for the water curtain controlling particulate emissions from the Chassis spray booth (1PE-001). Readings shall be recorded at least once per shift during process operations.
- h. Material Safety Data Sheets (MSDS), Certified Product Data Sheets (CPDS) or other vendor information approved by VDEQ showing VOC content, HAP content, water content, and solids content for each coating, adhesive, thinner, cleaning solution, etc. used in the emission units in the Equipment List Table A.
- i. Results of all stack tests, visible emission evaluations and performance evaluations for emission units in the Equipment List Table A.
- j. Scheduled and unscheduled maintenance and operator training for emission units in the Equipment List Table A.

These records shall be available for inspection by the VDEQ and shall be current for the most recent five years.

(9VAC5-80-110 and Condition 47 of the January 25, 2023 Permit Document)

52. **On Site Records – Equipment List Table B** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this

permit for the equipment listed in Equipment List Table B (except for RBT which is addressed by Condition 53). The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

- a. Material Safety Data Sheets (MSDS), Certified Product Data Sheets (CPDS), or other vendor information as approved by DEQ showing VOC content, HAP content, water content, and solids content for each coating, adhesive, thinner and cleaning solution.
- b. VOC content in pounds/gallon for the coatings used in the emission units in Condition 18 accounting for waterborne/exempt solvent paints/coatings on both bases of with water and exempt solvents and less water and exempt solvents.
- c. Monitoring records as required by Condition 25.
- d. Percent solids content by weight (per gallon) for the coatings used in the emissions units in Condition 19.
- e. Operational and control device monitoring records for the differential pressure gauges and water pressure gauges as required in Condition 22 and 23.
- f. Operational and control device monitoring records for the RTO combustion chamber temperature measurement and recording devices as required in Condition 26.
- g. Monthly and annual throughput in tons of VOC for each emissions unit listed in Table B. Annual throughputs shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- h. Monthly emissions calculations for VOC using calculation methods approved by the Blue Ridge Regional Office to verify compliance with the emissions limitations in Condition 38 and 44. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- i. Monthly emissions calculations for particulate matter using calculation methods approved by the Blue Ridge Regional Office to verify compliance with the emissions limitations in Condition 40. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

- j. Scheduled and unscheduled maintenance and operator training, including all maintenance conducted on Emergency Engine (EGEN5) to satisfy Condition 57.
- k. Manufacturer's emission guarantee for the burners of RTOs 3FBE-006 and 8FBE-012.
- l. Annual hours of operation of the Emergency Engine (EGEN5).
- m. Documentation from the manufacturer that Emergency Engine (EGEN5) is certified to meet the emission standards as required in 40 CFR Part 1048, as applicable.
- n. Documentation that Emergency Engine (EGEN5) meets the compliance standards in 40 CFR 60.4243 as required by Conditions 57 and Condition 59, if EGEN5 operates in a non-certified manner.
- o. If Emergency Engine (EGEN5) operates for purpose of 40 CFR 60.4243(d)(3)(i), then an annual report shall be submitted in accordance with 40 CFR 60.4245(e)(1) – (3).
- p. All notifications submitted to comply with 40 CFR 60 Subpart JJJJ and all documentation supporting any notifications.
- q. Results of all stack tests, visible emission evaluations and performance evaluations.
- r. Copies of all notifications submitted according to Condition 55.
- s. Records verifying control efficiency for particulate controls required by Condition 3.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9VAC5-80-110 and Condition 48 of the January 25, 2023 Permit Document)

53. **On Site Records – (RBT)** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit for the Robotic Paint Spray Booth (RBT). The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:
- a. Annual throughput of coating material, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. Material Safety Data Sheets (MSDS), Certified Product Data Sheets (CPDS), or other vendor information as approved by DEQ showing VOC content, HAP content, water content, and solids content for each coating and thinner used.

- c. Operation and control device monitoring records for the monitoring device as required in Condition 30.
- d. Scheduled and unscheduled maintenance and operator training.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9VAC5-80-110 and Condition 10 of the April 6, 2012 Permit Document)

54. **Reporting – (EGEN5)** - If testing is required per Condition 59, the details of the tests are to be arranged with the Blue Ridge Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. The permittee must submit a copy of each performance test as conducted in accordance with 40 CFR 60.4244 within 60 days after the test has been completed. The copy of each performance test shall be submitted to the Blue Ridge Regional Office.

(9VAC5-80-110 and Condition 49 of the January 25, 2023 Permit Document)

55. **Initial Notifications** – The permittee shall furnish the written notifications listed in a. and b. below to the Blue Ridge Regional Office for each of the following emissions units:

4PE-002 Seam Sealer
10PE-004 Spot Repair
Virgin Solvent Tank
Waste Solvent Tank
BIW Plant 1
BIW Plant 2

- a. The actual date on which construction or modification of each unit commenced within 30 days after such date.
- b. The actual start-up date of each unit within 15 days after such date.

(9VAC5-80-110 and Condition 64 of the January 25, 2023 Permit Document)

NSPS Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Emission Standards

56. **NSPS Subpart JJJJ - Limitations (EGEN2, EGEN4, EGEN5, EGEN6)** – Emissions from each natural gas fired emergency engines (EGEN2, EGEN4, EGEN5 and EGEN6) shall not exceed the limits below:

NO _x	2.0 g/HP-hr	160 ppmvd @ 15% O ₂
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CO	4.0 g/HP-hr	540 ppmvd @ 15% O ₂
VOC	1.0 g/HP-hr	86 ppmvd @ 15% O ₂

The permittee shall operate and maintain the natural gas fired emergency engine to comply with this condition over the entire life of the engine.
(9VAC5-80-110, 40 CFR 60.4233(e) and 40 CFR 60.4234)

Compliance Requirements

57. NSPS Subpart JJJJ – Compliance Requirements (EGEN2, EGEN4, EGEN5, EGEN6)
– The permittee must demonstrate compliance with each certified natural gas fired emergency engine (EGEN2, EGEN4, EGEN5 and EGEN6) according to 40 CFR 60.4243 (a)(1) or (a)(2)(ii)-(iii).

- a. If EGEN2, EGEN4, EGEN5, EGEN6 and control devices are operated and maintained according to the manufacturer's emission-related written instructions, the permittee must:
 - (i) Maintain records of conducted maintenance to demonstrate compliance; and,
 - (ii) The permittee shall meet the requirements as specified in 40 CFR Part 1068, subparts A through D, as they apply.
- b. If EGEN2, EGEN4, EGEN5, EGEN6 and control devices are not operated and maintained according to the manufacturer's emission related written instructions, the applicable engines will be considered a non-certified engine and must demonstrate compliance according to the following:
 - (i) Keep a maintenance plan;
 - (ii) Keep records of conducted maintenance;
 - (iii) To the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practices for minimizing emissions; and,
 - (iv) Conduct an initial and/or subsequent performance test to demonstrate compliance as specified in Condition 58 or 59.

(9VAC5-80-110, 40 CFR 60.4243(a), Condition 28 of the January 25, 2023 Permit Document and 40 CFR 60.4243(b)(1))

58. NSPS Subpart JJJJ – Compliance Requirements (EGEN2, EGEN4, EGEN6) - If the permittee does not operate and maintain each certified stationary SI internal combustion engine (EGEN2, EGEN4, and EGEN6) and control device(s) according to the

manufacturer's written emission-related instructions, the permittee is required to perform initial performance testing as indicated in 40 CFR 60.4244, but the permittee is not required to conduct subsequent performance testing unless the stationary engine is rebuilt (as defined in 40 CFR 94.11(a)) or undergoes major repair or maintenance.

(9VAC5-80-110 and 40 CFR 60.4243(f))

59. **NSPS Subpart JJJJ – Compliance Requirements (EGEN5)** – If the permittee does not operate and maintain each certified stationary SI internal combustion engine (EGEN5) and control device(s) according to the manufacturer's written emission-related instructions, the permittee is required to perform initial performance testing as indicated in 40 CFR 60.4244, and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.
(9VAC5-80-110, Condition 29 of the January 25, 2023 Permit Document and 40 CFR 60.4243(a)(2)(iii))

60. **NSPS Subpart JJJJ – Compliance Requirements (EGEN2, EGEN4, EGEN5, EGEN6)** - In order to be classified as an emergency stationary internal combustion engine under NSPS Subpart JJJJ, each natural gas fired emergency engine's (EGEN2, EGEN4, EGEN5, and EGEN6) annual operation is limited to:

- a. No more than an aggregate of 100 hours per calendar year for maintenance checks and readiness testing, in accordance with 60.4243(d)(2)(i); and,
- b. 50 operating hours per calendar year for non-emergency situations, as described in 60.4243(d)(3). The 50 hours of non-emergency operation are counted as part of the 100 hours per calendar year for maintenance and testing.

If the EGEN2, EGEN4, EGEN5, or EGEN6 are not operated in accordance with this condition, the applicable engine will not be considered an emergency engine under 40 CFR 60 Subpart JJJJ and must meet all requirements for non-emergency engines. There is no time limit on the use of emergency stationary ICE in emergency situations.
(9VAC5-80-110 and 40 CFR 60.4243(d))

61. **NSPS Subpart JJJJ – Compliance Requirements (EGEN2, EGEN4, EGEN5, EGEN6)** – Air-to-fuel ratio (AFR) controllers are required to be used with the operation of the catalytic reduction that is used on each natural gas fired emergency generator (EGEN2, EGEN4, EGEN5 and EGEN6). The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.
(9VAC5-80-110 and 40 CFR 60.4243(g))

Notifications, Reports and Recordkeeping

62. NSPS Subpart JJJJ – Notifications, Reports and Records (EGEN2, EGEN4, EGEN5, EGEN6) - The permittee shall meet the following notification, reporting and recordkeeping requirements:

- a. The permittee must keep records of the following information:
 - (i) Maintenance conducted on each natural gas fired emergency engine (EGEN2, EGEN4, EGEN5, and EGEN6).
 - (ii) Documentation from the manufacturer that EGEN2, EGEN4, EGEN5 and EGEN6 are certified to meet the emission standards and information as required in 40 CFR part 1048, as applicable.
 - (iii) Documentation that EGEN2, EGEN4, EGEN5 and EGEN6 meet the compliance standards in 40 CFR 60.4243(a)(2) as required by Conditions 57.b, 58 and 59, if the certified stationary SI internal combustion engine operates in a non-certified manner.
 - (iv) All notifications submitted to comply with this subpart and all documentation supporting any notification.
- b. The permittee shall submit a test protocol at least 30 days prior to testing and a copy of each performance test as conducted in accordance with 40 CFR 60.4244 within 60 days after the test has been completed, if testing is required per Condition 57.b or 59. The copy of each performance test shall be submitted to the VADEQ Blue Ridge Regional Office.

Records shall be maintained for at least two years from the date of the record.
(9VAC5-80-110 and 40 CFR 60.4245)

General Provisions

63. NSPS Subpart JJJJ – General Provisions (EGEN2, EGEN4, EGEN5, EGEN6) – The permittee shall comply with the applicable requirements in Table 3 of Subpart JJJJ.
(9VAC5-80-110 and 40 CFR 60.4246)

Maximum Achievable Control Technologies (MACT)

MACT Subpart ZZZZ – Stationary Reciprocating Internal Combustion Engines

General Compliance Requirements

64. MACT Subpart ZZZZ – Affected Source – (EGEN2, EGEN4, EGEN5, EGEN6) – Each natural gas emergency generator (EGEN2, EGEN4, EGEN5, and EGEN6) is an affected source under Subpart ZZZZ and must meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart JJJJ.
(9VAC5-80-110 and 40 CFR 63.6590(c))

65. **MACT Subpart ZZZZ – General Compliance Requirements (EGEN3)** – The permittee shall be in compliance with the applicable requirements of 40 CFR Subpart ZZZZ that apply to the source at all times.
(9VAC5-80-110 and 40 CFR 63.6605(a))
66. **MACT Subpart ZZZZ – General Compliance Requirements (EGEN3)** – At all times the permittee shall operate and maintain the affected source in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records and inspection of the source.
(9VAC5-80-110 and 40 CFR 63.6605(b))

Emission and Operation Limitations

67. **MACT Subpart ZZZZ - Work Practices (EGEN3)** – The permittee shall comply with the following work practice requirements for the diesel fired emergency generator (EGEN3):
- a. Change oil and filter every 500 hours of operation or annually, whichever comes first. The permittee has the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) in order to extend the preceding oil change requirement;
 - b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
 - c. Inspect all hoses and belts every 500 hours of operation, whichever comes first, and replace as necessary [The permittee can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices].

If EGEN3 is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule of this condition, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated.
(9VAC5-80-110, 40 CFR 63.6602 and Table 2c to 40 CFR 63 Subpart ZZZZ)

68. **MACT Subpart ZZZZ – Operation (EGEN3)** - The permittee shall minimize the diesel fired emergency generator (EGEN3) time spent at idle during startup and minimize the

engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. The permittee can petition the EPA Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.
(9VAC5-80-110, Table 2c of 40 CFR 63 Subpart ZZZZ and 40 CFR 63.6625(h))

Initial and Continuous Compliance Requirements

69. **MACT Subpart ZZZZ – Operation & Maintenance – (EGEN3)** - The permittee shall operate and maintain the diesel fired emergency generator (EGEN3) and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. If an optional oil analysis program is used in accordance with 40 CFR 63.6625(i), it must be part of the maintenance plan.
(9VAC5-80-110, 40 CFR 63.6625(e) and 40 CFR 63.6625(i))
70. **MACT Subpart ZZZZ – Monitoring (EGEN3)** – The diesel fired emergency generator (EGEN3) shall be equipped with a non-resettable hour meter.
(9VAC5-80-110 and 40 CFR 63.6625(f))
71. **MACT Subpart ZZZZ – Continuous Compliance Requirements (EGEN3)** - The permittee shall demonstrate continuous compliance by operating and maintaining the diesel fired emergency generator (EGEN3) in compliance with the work practice requirements in Condition 69.
(9VAC5-80-110, Table 6 of 40 CFR 63 Subpart ZZZZ, and 40 CFR 63.6640(a))
72. **MACT Subpart ZZZZ – Continuous Compliance Requirements (EGEN3)** - The emergency stationary RICE (EGEN3) must be operated according to the following requirements:
 - a. Each engine may be operated for a maximum of 100 hours for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
(40 CFR 63.6640(f)(2)(i))
 - b. Each engine may be operated for up to 50 hours per calendar year in non-emergency situations. The hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility

to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
(40 CFR 63.6640(f)(3)).

If EGEN3 is not operated in accordance with this Condition, the engine will not be considered an emergency engine under Subpart ZZZZ and must meet all applicable requirements for non-emergency engines.
(9VAC5-80-110 and 40 CFR 63.6640(f)(1), (2)(i) & (3))

73. **MACT Subpart ZZZZ – Continuous Compliance Requirements (EGEN3)** – The permittee shall comply with the applicable requirements in Table 8 to Subpart ZZZZ.
(9VAC5-80-110 and 40 CFR 63.6665)

Reports and Recordkeeping

74. **MACT Subpart ZZZZ – Recordkeeping (EGEN3)** - The permittee shall keep records as listed below:
- a. Records of maintenance conducted on EGEN3 in order to demonstrate proper operation and maintained the stationary RICE and after-treatment control device (if any) according to Condition 69 (40 CFR 63.6655(e));
 - b. If EGEN3 does not operate in accordance with Condition 72 and is considered a non-emergency engine, records of engine operating hours recorded through the non-resettable hour meter are required to be kept. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation (40 CFR 63.6655(f)); and,
 - c. If the oil analysis program described in Condition 69 is implemented, the permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine (40 CFR 63.6625(i)).

The permittee must keep each record in a form suitable, readily available for expeditious review, and readily accessible in hard copy or electronic form for at least 5 years after the date of each measurement, maintenance, or record, according to 40 CFR 63.10(b)(1).
(9VAC5-80-110, 40 CFR 63.6625(i), 40 CFR 63.6655(e) & (f) and 40 CFR 63.6660)

75. **MACT Subpart ZZZZ – Reporting (EGEN3)** – The permittee must report each instance in which the source did not meet the requirements of Condition 67, Condition 68, and any applicable general provision of Subpart A of Part 63, in the semi-annual compliance report required by Condition 127.
(9VAC5-80-110, 40 CFR 63.6640(b), and 40 CFR 63.6650(f))

MACT Subpart MMMM - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Metal Parts and Products and MACT Subpart PPPP - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products

The coating operations that are affected sources of MACT MMMM, as defined by 40 CFR 63.4482(b), are: 1PE-001, 3PE-001/-002, 5PE-002, 7PE-008, 8PE-002/-004, 9PE-001, 10PE-001/-002/-003/-004, 13PE-001/-002/-004, and RBT. These coating operations are referred to as 'metal coating operations' in Conditions 76, 77, 81, and 84.

The coating operations that are affected sources of MACT PPPP, as defined by 40 CFR 63.3882(b), are: 5PE-002, 7PE-002, 7PE-003, 7PE-008, 7PE-009, 8PE-002/-003, 9PE-002, 9FBE-006/-007/-008, 10PE-001/-002/-003/-004, 13PE-001/-002/-004, and RBT. These coating operations are referred to as 'plastic coating operations' in Conditions 78, 79, 82, and 85.

General Compliance Requirements

76. **MACT Subpart MMMM** – At all times, metal coating operations must be in compliance with the applicable emission limit outlined in Condition 81 of this permit.
(9VAC5-80-110 and 40 CFR 63.3900(a)(i))
77. **MACT Subpart MMMM** - The permittee shall comply with the applicable General Provisions as specified in Table 2 of 40 CFR 63 Subpart MMMM for metal coating operations.
(9VAC5-80-110 and 40 CFR 63.3901)
78. **MACT Subpart PPPP** - At all times, plastic coating operations must be in compliance with the applicable emission limit outlined in Condition 82 of this permit.
(9VAC5-80-110 and 40 CFR 63.4500(a)(1))
79. **MACT Subpart PPPP** – The permittee shall comply with the applicable General Provisions as specified Table 2 of 40 CFR 63 Subpart PPPP for plastic coating operations.
(9VAC5-80-110 and 40 CFR 63.4501)
80. **MACT Subpart MMMM & MACT Subpart PPPP** – The permittee must always operate and maintain the affected source, including all air pollution control and monitoring equipment you use for purposes of complying with 40 CFR 63 Subpart MMMM or 40 CFR 63 Subpart PPPP, according to the following provisions of §63.6(e)(1)(i): At all times, including periods of startup, shutdown, and malfunction, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the permittee reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of

startup, shutdown, or malfunction does not require the permittee to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in §63.6(e)(3)), review of operation and maintenance records, and inspection of the source.
(9VAC5-80-110, 40 CFR 63.3900(b) and 40 CFR 63.4500(b))

Emission Limitations

81. **MACT Subpart MMMM** – Organic HAP emissions from the metal coating operations are limited to:

No more than 0.31 kg (2.6 lb) organic HAP per liter (gal) coating solids during each 12-month compliance period

The organic HAP emission rate shall be calculated monthly as the sum of each consecutive 12-month period according to 40 CFR 63.3951(a) through (g). Continuous compliance with this limit is demonstrated by maintaining an average organic HAP emission rate for each consecutive 12-month period that is less than or equal to this limit. The Subpart defines a consecutive 12-month period as a compliance period.
(9VAC5-80-110, 40 CFR 63.3890(b)(1), and 40 CFR 63.3952(a))

82. **MACT Subpart PPPP** – Organic HAP emissions from the plastic coating operations are limited to:

No more than 0.16 kg (0.16 lb) organic HAP emitted per kg (lb) coating solids, used during each 12-month compliance period.

The organic HAP emission rate shall be calculated monthly as the sum of each consecutive 12-month period according to 40 CFR 63.4551 (a) through (g). Continuous compliance with this limit is demonstrated by maintaining an average organic HAP emission rate for each consecutive 12-month period that is less than or equal to this limit. The Subpart defines a consecutive 12-month period as a compliance period.
(9VAC5-80-110, 40 CFR 63.4490(b)(1), and 40 CFR 63.4552(a))

83. **MACT Subpart MMMM & MACT Subpart PPPP** – The coating operations that meet the applicability criteria of MACT Subpart MMMM and MACT Subpart PPPP can satisfy Conditions 81 and 82 by:

- a. Complying with a facility-specific emission limit calculated from the relative amount of coating activity that is subject to Conditions 81 and 82, in accordance with the identical provisions 40 CFR 63.3890(c)(2) and 40 CFR 63.4490(c)(2).

(9VAC5-80-110, 40 CFR 63.3881(e)(3), and 40 CFR 63.4481(e)(3))

Reports

84. **MACT Subpart MMMM**– The permittee must submit semiannual compliance reports for the metal coating operations according to the applicable requirements in 40 CFR 63.3920(a)(1) through (7). The semiannual compliance reports may be included with the Title V reporting if the reporting meets the requirements of 40 CFR 63.3920(a)(2). (9VAC5-80-110 and 40 CFR 63.3920(a))
85. **MACT Subpart PPPP** – The permittee must submit semiannual compliance reports for the plastic coating operations according to the applicable requirements of 40 CFR 63.4520(a)(1) through (7). The semiannual compliance reports may be included with the Title V reporting if the reporting meets the requirements of 40 CFR 63.4520(a)(2). (9VAC5-80-110 and 40 CFR 63.4520(a))

Records

86. **MACT Subpart MMMM - Records** - The permittee must collect and keep the following records:
 - a. Copy of each notification and report submitted to comply with 40 CFR Subpart MMMM (40 CFR 63.3930(a));
 - b. Current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and the volume fraction of coating solids for each coating (40 CFR 63.3930(b));
 - c. A record of the coating operations on which you used each compliance option and the time periods (beginning and ending dates and times) for each option used during each compliance period (40 CFR 63.3930(c)(1));
 - d. HAP emission rate calculations required by Condition 81 (40 CFR 63.3930(c)(3));
 - e. A record of the name and volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period (40 CFR 63.3930(d));

- f. A record of the mass fraction of organic HAP for each coating, thinner, and/or other additive, and cleaning material used during each compliance period unless the material is tracked by weight (40 CFR 63.3930(e));
- g. A record of the volume fraction of coating solids for each coating used during each compliance period (40 CFR 63.3930(f));
- h. The density for each coating, thinner and/or other additive, and cleaning material used during each compliance period (40 CFR 63.3930(g)); and,
- i. Records of the date and time of each deviation from 40 CFR Subpart Mmmm (40 CFR 63.3930(j)).

Failure to collect and keep these records is a deviation from 40 CFR Subpart Mmmm.

These records must be kept in a form suitable and readily available for expeditious review. Where appropriate, the records may be maintained as electronic spreadsheets or as a database. The records must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records must be kept on-site for 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record and may be kept off-site for the remaining 3 years. (9VAC5-80-110, 40 CFR 63.3930(a), (b), (c)(1), (c)(3), (d) – (g) & (j), and 40 CFR 63.3931)

87. **MACT Subpart Pppp - Records** - The permittee must collect and keep the following records:

- a. Copy of each notification and report submitted to comply with 40 CFR Subpart Pppp (40 CFR 63.4530(a));
- b. Current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and the mass fraction of coating solids for each coating (40 CFR 63.4530(b));
- c. A record of the affected sources on which you used each compliance option and the time periods (beginning and ending dates and times) for each option you used (40 CFR 63.4530(c)(1));
- d. HAP emission rate calculations required by Conditions 82 (40 CFR 63.4530(c)(3));
- e. A record of the name and mass of each coating, thinner and/or other additive, and cleaning material used during each compliance period (40 CFR 63.4530(d));

- f. A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period (40 CFR 63.4530(e));
- g. A record of the mass fraction of coating solids for each coating used during each compliance period (40 CFR 63.4530(f)); and,
- h. Records of the date, time and duration of each deviation of 40 CFR 63 Subpart P (40 CFR 63.4530(h)).

Failure to collect and keep these records is a deviation from 40 CFR 63 Subpart P.

These records must be kept in a form suitable and readily available for expeditious review. Where appropriate, the records may be maintained as electronic spreadsheets or as a database. The records must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records must be kept on-site for 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record and may be kept off-site for the remaining 3 years. (9VAC5-80-110, 40 CFR 63.4530(a), (b), (c)(1), (c)(2), (d) – (f), & (j), and 40 CFR 63.4531)

MACT Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

The affected source consists of six boilers; two (2) new industrial boilers, Pretreatment Boiler #1 (2FBE-003) and Pretreatment Boiler #2 (2FBE-004), and two (2) existing industrial boilers, Plastics Washer Boiler (2FBE-002) and Burnham Boiler (14FBE-001).

General Compliance Requirements

- 88. **MACT Subpart DDDDD – (2FBE-002/-003/-004 and 14FBE-001)** – The permittee shall comply with the applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR 63, Subpart DDDDD) as listed in this section by the applicable compliance date specified in 40 CFR 63.7495(b). (9VAC5-80-110 and 40 CFR 63.7495)
- 89. **MACT Subpart DDDDD – General Provisions - (2FBE-002/-003/-004 and 14FBE-001)** – The permittee shall comply with the applicable General Provisions of 40 CFR Subpart 63.1 through 63.15 as specified in Table 10 of 40 CFR 63 Subpart DDDDD. (9VAC5-80-110 and 40 CFR 63.7565)
- 90. **MACT Subpart DDDDD – Work Practices - (2FBE-002/-003/-004 and 14FBE-001)** – At all times, the permittee must operate and maintain the affected source in a manner consistent with safety and good air pollution control practices for minimizing emissions.

Determination of whether such operation and maintenance procedures are being used will be based on information that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(9VAC5-80-110 and 40 CFR 63.7500(a)(3))

Initial Compliance Requirements

91. **MACT Subpart DDDDD – Initial Tune-ups - (2FBE-003/-004)** – The permittee must complete an initial tune-up for the Pretreatment Boiler #1 (2FBE-003) and Pretreatment Boiler #2 (2FBE-004) by following the procedures described in 40 CFR 63.7540(a)(11) no later than 25 months after the initial startup date of the applicable boiler.
(9VAC5-80-110 and 40 CFR 63.7510(g))

Continuous Compliance Requirements

92. **MACT Subpart DDDDD – Work Practice Standards - (2FBE-003/-004)** – The permittee must conduct a tune-up of the Pretreatment Boiler #1 (2FBE-003), and Pretreatment Boiler #2 (2FBE-004) annually as specified below in order to demonstrate continuous compliance. Each annual tune-up must be conducted no more than 13 months after the previous tune-up. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.
- a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the burner inspection may be delayed until the next scheduled unit shutdown) (40 CFR 63.7540(a)(10)(i));
 - b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustments should be consistent with the manufacturer's specifications, if available (40 CFR 63.7540(a)(10)(ii));
 - c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. (This inspection may be delayed until the next scheduled unit shutdown.) (40 CFR 63.7540(a)(10)(iii));
 - d. Optimize total emissions of CO consistent with the manufacturer's specifications, if available (40 CFR 63.7540(a)(10)(iv));
 - e. Measure the concentration in the effluent stream of CO in parts per million, by volume, and oxygen, in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer (40 CFR 63.7540(a)(10)(v)); and

- f. Maintain on-site, and submit, if requested by the Administrator, a report containing the following information:
- (i) The concentrations of CO and oxygen, as measured above, at high fire or typical operating load, before and after the tune-up of boiler;
 - (ii) A description of any corrective actions taken as part of the tune-up; and,
 - (iii) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. If the unit shares a fuel meter, its fuel use may be estimated based on that meter (40 CFR 63.7540(a)(10)(vi)).

(9VAC5-80-110, 40 CFR 63.7500(b), 40 CFR 63.7540(a)(10) and (a)(13), 40 CFR 63.7515(d), Table 3 of 40 CFR 63 Subpart DDDDD)

93. **MACT Subpart DDDDD – Work Practice Standards – (2FBE-002, 14FBE-001)** -- The permittee must conduct a biennial tune-up the following boilers as specified in Condition 92(a) through (f) in order to demonstrate continuous compliance with the work practice standards: 2FBE-002 and 14FBE-001. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. (9VAC5-80-110, 40 CFR 63.7500(b) and (e), 40 CFR 63.7515(d), 40 CFR 63.7540(a)(11) and (a)(13), and Table 3 of 40 CFR 63 Subpart DDDDD)

Notifications

94. **MACT Subpart DDDDD – Notifications - (2FBE-003/-004)** – The permittee shall submit a Notification of Compliance Status for the Pretreatment Boiler #1 (2FBE-003) and Pretreatment Boiler #2 (2FBE-004) in accordance with 40 CFR 63.7545(e). The Notification of Compliance Status shall include:
- a. A description of the affected unit including identification of which subcategory the unit is in, the design heat input capacity of the unit, and description of the fuel burned (40 CFR 63.7545(e)(1));
 - b. A signed certification that you have met all applicable emission limits and work practice standard (40 CFR 63.7545(e)(6));
 - c. If you had a deviation from any work practice standard or operating limit, you must also submit a description of the deviation, the duration of the deviation, and

the corrective action taken in the Notification of Compliance Status report (40 CFR 63.7545(e)(7)); and,

- d. In addition to the information required in §63.9(h)(2), your notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official (40 CFR 63.7545(e)(8)):
 - (i) “This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR part 63 subpart DDDDD at this site according to the procedures in §63.7540(a)(10)(i) through (vi).”

(9VAC5-80-110, 40 CFR 63.7545(e) and 40 CFR 63.7495(d))

Reports

95. **MACT Subpart DDDDD – Reports - (2FBE-002/-003/-004, and 14FBE-001)** – The permittee shall submit a compliance report for the boilers listed in Conditions 92, and 93 according to the requirements in 63.7550(b)(1) through (5). The compliance report shall include the below information specified in 40 CFR 63.7550(c)(5)(i) –(iii), (xiv) and (xvi), and Table 9 of 40 CFR 63 Subpart DDDDD:
- a. Company and Facility name and address [40 CFR 63.7550(c)(5)(i)];
 - b. Process unit information [40 CFR 63.7550(c)(5)(ii)];
 - c. Date of report and beginning and ending dates of the reporting period [40 CFR 63.7550(c)(5)(iii)];
 - d. Date of the most recent tune-up for each unit [40 CFR 63.7550(c)(5)(xiv)];
 - e. Date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown [40 CFR 63.7550(c)(5)(xiv)];
 - f. The following as required in Table 9 of 40 CFR 63 Subpart DDDDD:
 - (i) A statement that there were no deviations from the emission limitations and work practice standards during the reporting period (see Table 9 item 1.b); and,
 - (ii) If there is a deviation from a work practice standard for periods of startup and shutdown, during the reporting period, the report must contain the following information in 40 CFR 63.7550(d)(1) and (2) (see Table 9 Item 1.c):

1. For each deviation a description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated, and,
 2. Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.
- g. Statement by a responsible official with that official's name, title, and signature, certifying the truth accuracy, and completeness of the content of the report [40 CFR 63.7550(c)(5)(xvii)].

Each compliance report is required to be submitted electronically to the EPA via the CEDRI (CEDRI can be accessed through the EPA's CDX) using the appropriate electronic report in CEDRI for 40 CFR 63 Subpart DDDDD. An alternate electronic file consistent with the XML schema listed on the CEDRI website is allowed. If the reporting form specific to 40 CFR 63 Subpart DDDDD is not available in CEDRI, at the time that the report is due, you must submit the report to the Blue Ridge Regional Office. (9VAC5-80-110; 40 CFR 63.7550(a), (b), (c)(1), & (h)(3); and Table 9 of 40 CFR 63 Subpart DDDDD)

96. **MACT Subpart DDDDD – Records - (2FBE-002/-003/-004, and 14FBE-001) –** The permittee must keep the following records:

- a. A copy of each notification and report that was submitted to comply with Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or compliance report that was submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv), and,
- b. Records of each compliance demonstrations as required in 40 CFR 63.10(b)(2)(viii).

These records must be kept in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). As specified in 40 CFR 63.10(b)(1) the records must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records must be kept on-site for at least 2 years from the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(g)(1). The record and may be kept off-site for the remaining 3 years.

(9VAC5-80-110, 40 CFR 63.7555(a)(1) and (2), and 40 CFR 63.7560)

FACILITY WIDE CONDITIONS

PROCESS REQUIREMENTS

97. **Facility Wide - Emission Controls** - Reasonable precautions shall be taken to minimize volatile organic compound (VOC) emissions from cleaning and purging operations. Reasonable precautions may include the following:

- a. The use of capture or control devices or both.
- b. The use of detergents, high pressure water, or other non-volatile cleaning methods.
- c. The minimization of the quantity of the volatile organic compounds used to clean lines.
- d. The adjustment of production schedules to minimize coatings changes thereby reducing the need for frequent cleaning or purging of the system.

(9VAC5-80-110 and Condition 50 of the January 25, 2023 Permit Document)

98. **Facility Wide - Testing/Monitoring Ports** - The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Test ports shall be provided when requested at the appropriate locations or in accordance with the applicable performance specification (reference 40 CFR Part 60, Appendix B).

(9VAC5-80-110, Condition 6 of the April 6, 2012 Permit Document and Condition 51 of the January 25, 2023 Permit Document)

OPERATING LIMITS

99. **Facility Wide - Fuel** - The approved fuels for all fuel burning equipment in Tables A & B is natural gas. A change in the fuel may require a permit to modify and operate.

(9VAC5-80-110 and Condition 52 of the January 25, 2023 Permit Document)

100. **Facility Wide - Fuel Throughput** - The facility as a whole shall consume no more than 920×10^6 standard cubic feet of natural gas per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9VAC5-80-110 and Condition 53 of the January 25, 2023 Permit Document)

101. **Facility Wide - VOC Work Practice Standards** – At all times the disposal of volatile organic compounds shall be accomplished by taking measures, to the extent practicable, consistent with air pollution control practices for minimizing emissions. Volatile organic compounds shall not be intentionally spilled, discarded in sewers which are not connected

to a treatment plant, or stored in open containers, or handled in any other manner that would result in evaporation beyond that consistent with air pollution practices for minimizing emissions.

(9VAC5-80-110, Condition 3 of the April 6, 2012 Permit Document and Condition 55 of the January 25, 2023 Permit Document)

CONTINUING COMPLIANCE

102. **Facility Wide - Stack Tests** - Upon request by the DEQ, the permittee shall conduct additional performance tests to demonstrate compliance with the emission limits and control efficiency requirements contained in this permit. The details of the tests shall be arranged with the Blue Ridge Regional Office.

(9VAC5-80-110 and Condition 62 of the January 25, 2023 Permit Document)

103. **Facility Wide - Visible Emissions Evaluation** - Upon request by the DEQ, the permittee shall conduct additional visible emission evaluations to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Blue Ridge Regional Office.

(9VAC5-80-110 and Condition 63 of the January 25, 2023 Permit Document)

104. **Facility Wide - On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

- a. Annual consumption of natural gas, calculated monthly as the sum of each consecutive 12-month period to verify compliance with Condition 100. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- b. Annual hours of operation of the cab painting department to verify compliance with Conditions 36 & 45. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- c. These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9VAC5-80-110 and Condition 58 of the January 25, 2023 Permit Document)

105. **Facility Wide Conditions - Permit Copy** - The permittee shall keep a copy of the following permits on the premises of the facility: April 6, 2012 Permit Document, and January 25, 2023 Permit Document.
(9VAC5-80-110, Condition 20 of the April 6, 2012 Permit Document, and Condition 75 of the January 25, 2023 Permit Document)

COMPLIANCE ASSURANCE MONITORING (CAM)

1PE-001A, 5PE-002A/-002B/-002C, 8PE-002A/-002B/-002C/-003A, 8PE-003B, 8PE-004A/-004B, 9PE-001A/-001B/-001C & 9PE-002A/-002B/-002C

106. **Compliance Assurance Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the concentrators (CONC-001/-002) and regenerative thermal oxidizer (8FBE-012) controlling the Cab Basecoat Spray Booth (8PE-004A/-004B) and Multitone/Basecoat/Clearcoat Spray Booth/Oven (8PE-002A/-002C) according to Attachment 1, page 11, Cam Plan for VOC: Cab BC (8FBE-004) and MT BC/CC (8PE-002) Emission Unit Concentrators (CONC-001/-002) and RTO (8FBE-012) Table. The RTO combustion chamber value shall be updated to the 3-hour average combustion chamber value derived from the most recent performance test that demonstrates compliance with Condition 38 or 44.
(9VAC5-80-110 E and 40 CFR 64.6(c))
107. **Compliance Assurance Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the regenerative thermal oxidizers (9FBE-011) controlling the Cab Prime Booth/Flash/Oven (5PE-002A/-002B/-002C), and Cab Clearcoat Spray Booth/Flash/Oven (9PE-001A/-001B/-001C) according to Attachment 1, page 18, Cam Plan for VOC: Cab Prime (5PE-002) and Cab CC (9PE-002) Emission Unit RTO (9FBE-011) Table. RTO combustion chamber value shall be updated to the 3-hour average combustion chamber value derived from the most recent performance test that demonstrates compliance with Condition 38 or 44.
(9VAC5-80-110 E and 40 CFR 64.6(c))
108. **Compliance Assurance Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the regenerative thermal oxidizers (9FBE-010) controlling the Plastics Basecoat (8PE-003A/-003B) and Plastics Clearcoat Spray Booth/Flash/Oven (9PE-002A/-002B/-002C) according to Attachment 1, page 24, Cam Plan for VOC: Plastics BC (8PE-003) and Plastics CC (9PE-002) Emission Unit RTO (9FBE-010) Table. The RTO combustion chamber value shall be updated to the 3-hour average combustion chamber value derived from the most recent performance test that demonstrates compliance with Condition 38 or 44.
(9VAC5-80-110 E and 40 CFR 64.6(c))
109. **Compliance Assurance Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the water curtain booth with dry filters controlling the chassis paint

booth (1PE-001A) according to Attachment 1, page 30, CAM Plan for the Chassis Paint Booth (1PE-001A) Emission Unit Table.
(9VAC5-80-110 E and 40 CFR 64.6(c))

110. **Compliance Assurance Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the precoated dry filter systems controlling the Cab Basecoat Spray Booth (8PE-004) and Cab Clearcoat Spray Booth (9PE-001) according to Attachment 1, page 34, CAM Plan for the Cab BC (8PE-004) and Cab CC (9PE-001) Paint Booths Emission Units Table.
(9VAC5-80-110 E and 40 CFR 64.6(c))
111. **Compliance Assurance Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the precoated dry filter system controlling the Plastics Basecoat Spray Booth (8PE-003) and Plastics Clearcoat Spray Booth (9PE-002) according to Attachment 1, page 38, CAM Plan for the Plastics BC (8PE-003) and CC (9PE-002) Paint Booths Emission Units Table.
(9VAC5-80-110 E and 40 CFR 64.6(c))
112. **Compliance Assurance Monitoring** - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
(9VAC5-80-110 E and 40 CFR 64.6(c))
113. **Compliance Assurance Monitoring** – At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
(9VAC5-80-110 E and 40 CFR 64.7(b))
114. **Compliance Assurance Monitoring** – Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that each emission unit (1PE-001, 8PE-002/-002A/-003/-003A, and 9PE-001/-001A/-002/-002A) is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
(9VAC5-80-110 E and 40 CFR 64.7(c))
115. **Compliance Assurance Monitoring** – Upon detecting an excursion or exceedance, the permittee shall restore operation of the 1PE-001, 8PE-002/-002A/-003/-003A, and 9PE-

001/-001A/-002/-002A (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.

(9VAC5-80-110 E and 40 CFR 64.7(d)(1))

116. **Compliance Assurance Monitoring** – Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(9VAC5-80-110 E and 40 CFR 64.7(d)(2))

117. **Compliance Assurance Monitoring** – If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Blue Ridge Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

(9VAC5-80-110 E, 40 CFR 64.7(e) and 40 CFR 64.6(c))

118. **Compliance Assurance Monitoring** – If the number of exceedances or excursions exceeds 5 percent duration of the operating time for any of the emission units (1PE-001, 8PE-002/-002A/-003/-003A, and 9PE-001/-001A/-002/-002A) for a semiannual reporting period the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate

- a. Improved preventative maintenance practices;
- b. Process operation changes;

- c. Appropriate improvements to control methods;
- d. Other steps appropriate to correct control performance; and
- e. More frequent or improved monitoring

(9VAC5-80-110 E and 40 CFR 64.8(a) and (b))

119. **Compliance Assurance Monitoring** - The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to §64.8 and any activities undertaken to implement a QIP, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

(9VAC5-80-110 F and 40 CFR 64.9(b))

120. **Compliance Assurance Monitoring** – The permittee shall submit CAM reports as part of the Title V semi-annual monitoring reports required by Condition 127 of this permit to the Blue Ridge Regional Office. Such reports shall include at a minimum:

- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(9VAC5-80-110 F and 40 CFR 64.9(a))

Insignificant Emission Units

121. **Insignificant Emission Units** - The following emission units at the facility are identified in the application as insignificant emission units under 9VAC5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
AST-501 - 502	Diesel Fuel Tanks	9VAC5-80-720B	VOC < 5 tpy	-
AST-801	Above Ground Storage Tank (AST) 75W90 Motor Oil	9VAC5-80-720B	VOC < 5 tpy	-
AST-802	AST - 80W90 Motor Oil	9VAC5-80-720B	VOC < 5 tpy	-
AST-803	AST - 75W90 Motor Oil	9VAC5-80-720B	VOC < 5 tpy	-
AST-804	AST - 50 Weight Transmission Lubricant	9VAC5-80-720B	VOC < 5 tpy	-
AST-805	AST - Ethylene Glycol	9VAC5-80-720B	VOC < 5 tpy	-
AST-806	AST - Ethylene Glycol	9VAC5-80-720B	VOC < 5 tpy	-
AST-807	AST - Ethylene Glycol	9VAC5-80-720B	VOC < 5 tpy	-
AST-808	AST - Diesel	9VAC5-80-720B	VOC < 5 tpy	-
AST-809	AST - Diesel	9VAC5-80-720B	VOC < 5 tpy	-
AST-810	AST - Methanol	9VAC5-80-720B	VOC < 5 tpy	-
AST-811	AST - Transmission Fluid	9VAC5-80-720B	VOC < 5 tpy	-
AST-812	AST - 10W40 Motor Oil	9VAC5-80-720B	VOC < 5 tpy	-

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
TUBEHTR1	Space-ray Tube Heater	9VAC5-80-720C	-	0.75 MMBtu/hr
BIW Weld	Non-Portable Welding Operations (BIW Building)	9VAC5-80-720B	PM < 5 tpy	-
CST1	Central Sludge Tank for Booth Water recirculation	9VAC5-80-720B	VOC < 5 tpy	-
WWTP002	Batch Waste Water Treatment Plant	9VAC5-80-720B	VOC < 5 tpy	-
V01 - V11	(11) 180 Gal process vessels for paint/solvent in paint kitchen	9VAC5-80-720B	VOC < 5 tpy	-
FBNWB13B	Paint basement locker room heater	9VAC5-80-720C	-	0.199 MMBtu/hr
FBNWB13C	Paint North Mezzanine Locker room heater	9VAC5-80-720C	-	0.199 MMBtu/hr
FBNWB13D	CCC Locker room heater	9VAC5-80-720C	-	0.199 MMBtu/hr
HV0101	MUA-001	9VAC5-80-720C	-	0.512 MMBtu/hr
HV0102	MUA-002	9VAC5-80-720C	-	3.063 MMBtu/hr
HV0103	MUA-003	9VAC5-80-720C	-	3.063 MMBtu/hr
HV0104	MUA-004	9VAC5-80-720C	-	3.063 MMBtu/hr
HV0105	MUA-005	9VAC5-80-720C	-	3.063 MMBtu/hr
HV0106	MUA-006	9VAC5-80-720C	-	3.063 MMBtu/hr
HV0107	MUA-007	9VAC5-80-720C	-	3.063 MMBtu/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
HV0108	MUA-008	9VAC5-80-720C	-	3.063 MMBtu/hr
HV0109	MUA-009	9VAC5-80-720C	-	3.063 MMBtu/hr
HV0119	Engineered Air Heating & Ventilation (HV) Unit	9VAC5-80-720C	-	1.795 MMBtu/hr
HV0120	Engineered Air HV Unit	9VAC5-80-720C	-	1.795 MMBtu/hr
HV0121	Engineered Air HV Unit	9VAC5-80-720C	-	1.795 MMBtu/hr
HV0122	Engineered Air HV Unit	9VAC5-80-720C	-	1.795 MMBtu/hr
HV0123	Engineered Air HV Unit	9VAC5-80-720C	-	1.795 MMBtu/hr
HV0124	Engineered Air HV Unit	9VAC5-80-720C	-	1.795 MMBtu/hr
HV0125	Engineered Air HV Unit	9VAC5-80-720C	-	1.795 MMBtu/hr
HV0126	Engineered Air HV Unit	9VAC5-80-720C	-	1.795 MMBtu/hr
HV0127	Engineered Air HV Unit	9VAC5-80-720C	-	1.795 MMBtu/hr
HV0128	Engineered Air HV Unit	9VAC5-80-720C	-	1.795 MMBtu/hr
HV0129	Hastings HV Unit	9VAC5-80-720C	-	1.503 MMBtu/hr
HV0130	Engineered Air HV Unit	9VAC5-80-720C	-	0.891 MMBtu/hr
HV0131	Engineered Air HV Unit	9VAC5-80-720C	-	0.655 MMBtu/hr
HV0132	MUA-013	9VAC5-80-720C	-	5.600 MMBtu/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
HV0133	MUA-014	9VAC5-80-720C	-	5.600 MMBtu/hr
HV0134	MUA-015	9VAC5-80-720C	-	5.600 MMBtu/hr
HV0135	MUA-016	9VAC5-80-720C	-	5.600 MMBtu/hr
HV0136	MUA-017	9VAC5-80-720C	-	5.600 MMBtu/hr
HV0137	MUA-018	9VAC5-80-720C	-	5.600 MMBtu/hr
HV0138	MUA-019	9VAC5-80-720C	-	5.600 MMBtu/hr
HV0139	MUA-020	9VAC5-80-720C	-	5.600 MMBtu/hr
HV0140	MUA-021	9VAC5-80-720C	-	2.203 MMBtu/hr
HV0141	MUA-022	9VAC5-80-720C	-	2.203 MMBtu/hr
HV0142	MUA-023	9VAC5-80-720C	-	4.590 MMBtu/hr
HV0143	MUA-024	9VAC5-80-720C	-	3.397 MMBtu/hr
HV0144	MUA-010	9VAC5-80-720C	-	4.590 MMBtu/hr
HV0145	MUA-011	9VAC5-80-720C	-	4.590 MMBtu/hr
HV0146	MUA-012	9VAC5-80-720C	-	4.590 MMBtu/hr
HV0147	ENG-A HV Unit	9VAC5-80-720C	-	2.112 MMBtu/hr
HV0148	King HV Supply for PC Chassis Booth MUA-002	9VAC5-80-720C	-	5.0 MMBtu/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
HV0149	ICA HV Unit for Parts Area	9VAC5-80-720C	-	5.000 MMBtu/hr
HV0150	ICE HV Unit for Demask Area	9VAC5-80-720C	-	5.000 MMBtu/hr
HV0151	MUA-037	9VAC5-80-720C	-	2.815 MMBtu/hr
HV0152	MUA-047	9VAC5-80-720C	-	2.815 MMBtu/hr
HV0153	MUA-040	9VAC5-80-720C	-	2.815 MMBtu/hr
HV0154	MUA-041	9VAC5-80-720C	-	2.815 MMBtu/hr
HV0155	MUA-042	9VAC5-80-720C	-	2.815 MMBtu/hr
HV0156	MUA-044	9VAC5-80-720C	-	2.815 MMBtu/hr
HV0157	MUA-045	9VAC5-80-720C	-	2.815 MMBtu/hr
HV0158	MUA-036	9VAC5-80-720C	-	2.815 MMBtu/hr
HV0159	MUA-038	9VAC5-80-720C	-	2.815 MMBtu/hr
HV0160	MUA-039	9VAC5-80-720C	-	2.815 MMBtu/hr
HV0161	MUA-043	9VAC5-80-720C	-	2.815 MMBtu/hr
HV0162	MUA-046	9VAC5-80-720C	-	2.815 MMBtu/hr
HV0163	MUA-027	9VAC5-80-720C	-	2.815 MMBtu/hr
HV0164	MUA-028	9VAC5-80-720C	-	2.815 MMBtu/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
HV0165	MUA-029	9VAC5-80-720C	-	2.815 MMBtu/hr
HV0166	MUA-030	9VAC5-80-720C	-	2.815 MMBtu/hr
HV0167	MUA-031	9VAC5-80-720C	-	2.815 MMBtu/hr
HV0168	MUA-032	9VAC5-80-720C	-	2.815 MMBtu/hr
HV0169	MUA-033	9VAC5-80-720C	-	2.815 MMBtu/hr
HV0170	MUA-034	9VAC5-80-720C	-	2.815 MMBtu/hr
HV0171	MUA-035	9VAC5-80-720C	-	2.815 MMBtu/hr
HV0172	Hastings HV Unit (Old Shipping Building)	9VAC5-80-720C	-	2.500 MMBtu/hr
HV0173	Hastings HV Unit (Old Shipping Building)	9VAC5-80-720C	-	2.500 MMBtu/hr
HV0176	Engineered Air HV Unit	9VAC5-80-720C	-	1.795 MMBtu/hr
HV0177	Engineered Air HV Unit	9VAC5-80-720C	-	1.795 MMBtu/hr
HV0178	Engineered Air HV Unit	9VAC5-80-720C	-	1.795 MMBtu/hr
HV0179	Engineered Air HV Unit	9VAC5-80-720C	-	1.795 MMBtu/hr
HV0180	Engineered Air HV Unit	9VAC5-80-720C	-	0.175 MMBtu/hr
HVAC0026	Heating Ventilation and Air Condition (HVAC) Truck Ship office & lounge	9VAC5-80-720A	-	0 MMBtu/hr-

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
HVAC01	HVAC - Truck Ship plant office	9VAC5-80-720A	-	0 MMBtu/hr-
HVAC0001	HVAC - PILOT REVIEW Trane (dravo)	9VAC5-80-720A	-	0.3 MMBtu/hr
HVAC0002	HVAC - IE OFFICE Trane	9VAC5-80-720A	-	0.25 MMBtu/hr
HVAC0005	HVAC - IE OFFICE Trane	9VAC5-80-720A	-	0.35 MMBtu/hr
HVAC0006	HVAC - TRAINING ROOM Carrier	9VAC5-80-720A	-	0.115 MMBtu/hr
HVAC0101	HVAC - Liebert AC-001 CDF	9VAC5-80-720A	-	0.056 MMBtu/hr
HVAC0102	HVAC - Trane AC-002	9VAC5-80-720A	-	0.6 MMBtu/hr
HVAC0103	HVAC - Trane AC-003	9VAC5-80-720A	-	0.25 MMBtu/hr
HVAC0104	HVAC - Trane AC-004	9VAC5-80-720A	-	0.12 MMBtu/hr
HVAC0105	HVAC - Trane AC-005	9VAC5-80-720A	-	0.25 MMBtu/hr
HVAC0110	HVAC - PAC-2 SOUTH ADM Trane	9VAC5-80-720A	-	0.14 MMBtu/hr
HVAC0111	HVAC - PAC-3 CAFÉ Trane	9VAC5-80-720A	-	0 MMBtu/hr
HVAC0112A	HVAC - PAC-7 COMPUTER ROOM Trane	9VAC5-80-720A	-	0 MMBtu/hr
HVAC0114	HVAC - MEN/WOMENS LOCKER Trane	9VAC5-80-720A	-	0.85 MMBtu/hr
HVAC0116	HVAC - South Cab Mezz Carrier	9VAC5-80-720A	-	0.25 MMBtu/hr
HVAC0125A	HVAC - Telephone room Trane	9VAC5-80-720A	-	0 MMBtu/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
HVAC0126	HVAC - Armstrong - South mech room	9VAC5-80-720A	-	0 MMBtu/hr
HVAC0127	HVAC - Maintenance office Trane	9VAC5-80-720A	-	0 MMBtu/hr
HVAC0128	HVAC - Trane ACU-004	9VAC5-80-720A	-	0.4 MMBtu/hr
HVAC0129	HVAC - PAC-1 (COOLING) Trane	9VAC5-80-720A	-	0 MMBtu/hr
HVAC0130	HVAC - COMPANY STORE Carrier	9VAC5-80-720A	-	0.074 MMBtu/hr
HVAC0131	HVAC - AAON 60 ton ACU-001	9VAC5-80-720A	-	1.495 MMBtu/hr
HVAC0132	HVAC - AAON 40 ton ACU-002	9VAC5-80-720A	-	1.280 MMBtu/hr
HVAC0133	HVAC - AAON 40 ton ACU-003	9VAC5-80-720A	-	1.280 MMBtu/hr
HVAC0134	HVAC - AAON 2 ton ACU-006	9VAC5-80-720A	-	0.063 MMBtu/hr
HVAC0135	HVAC - Armstrong - PLC room	9VAC5-80-720A	-	0 MMBtu/hr
HVAC0136	HVAC - AAON 30 ton ACU-005	9VAC5-80-720A	-	0.714 MMBtu/hr
HVAC0137	HVAC - South Warehouse office Trane	9VAC5-80-720A	-	0 MMBtu/hr
HVAC0138	HVAC - Biw Warehouse office/break	9VAC5-80-720A	-	0 MMBtu/hr
HVAC0139	HVAC - Methods Lab Trane	9VAC5-80-720A	-	0.15 MMBtu/hr
HVAC0141	HVAC - Pac 2 Trane	9VAC5-80-720A	-	0 MMBtu/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
HVAC0142	HVAC - Fitness Center Trane	9VAC5-80-720A	-	0.25 MMBtu/hr
HVAC0143	HVAC - TRUCK ENG COPY ROOM Trane	9VAC5-80-720A	-	0.15 MMBtu/hr
HVAC0144	HVAC - Dash Programming Heil	9VAC5-80-720A	-	0 MMBtu/hr
HVAC0147	HVAC - Waste Water Trane	9VAC5-80-720A	-	0 MMBtu/hr
HVAC0148	HVAC - HR trailer York	9VAC5-80-720A	-	0 MMBtu/hr
HVAC0149	HVAC - South Chassis office Goodman	9VAC5-80-720A	-	0.14 MMBtu/hr
HVAC0150	HVAC - Gate 2 Emi	9VAC5-80-720A	-	0 MMBtu/hr
HVAC0151	HVAC - Liebert AC-002 CDF	9VAC5-80-720A	-	0.05 MMBtu/hr
HVAC0152	HVAC - Methods Lab Trane	9VAC5-80-720A	-	0 MMBtu/hr
HTR01	DOOR 40 Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR02	DOOR 41 Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR03	DOOR 43 Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR04	DOOR 45 Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR05	DOOR 47 Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR06	DOOR 49 Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR07	DOOR 51 Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
HTR08	DOOR 53 Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR09	DOOR 55 Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR10	DOOR 57 Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR11	DOOR 59 Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR12	DOOR 61 Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR13	DRRL0140 Space Heating Unit	9VAC5-80-720C	-	0.30 MMBtu/hr
HTR14	DRRL0141 Space Heating Unit	9VAC5-80-720C	-	0.30 MMBtu/hr
HTR15	DRRL0142 Space Heating Unit	9VAC5-80-720C	-	0.04 MMBtu/hr
HTR16	DRRL0143 Space Heating Unit	9VAC5-80-720C	-	0.04 MMBtu/hr
HTR17	DRRL0144 Space Heating Unit	9VAC5-80-720C	-	0.04 MMBtu/hr
HTR18	KAIZEN Space Heating Unit	9VAC5-80-720C	-	0.04 MMBtu/hr
HTR20	DOOR 90A Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR21	DOOR 90C Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR22	DOOR 91 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR23	DOOR 93 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR24	DOOR 95A Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
HTR25	DOOR 95C Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR26	DOOR 95E Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR27	J10 Space Heating Unit	9VAC5-80-720C	-	0.30 MMBtu/hr
HTR28	H2 Space Heating Unit	9VAC5-80-720C	-	0.13 MMBtu/hr
HTR29	E1A HOLD Space Heating Unit	9VAC5-80-720C	-	0.13 MMBtu/hr
HTR30	A2 Space Heating Unit	9VAC5-80-720C	-	0.0.14 MMBtu/hr
HTR31	DOOR 109 Space Heating Unit	9VAC5-80-720C	-	0.04 MMBtu/hr
HTR32	DOOR 110 Space Heating Unit	9VAC5-80-720C	-	0.04 MMBtu/hr
HTR33	DOOR 111 Space Heating Unit	9VAC5-80-720C	-	0.04 MMBtu/hr
HTR34	DOOR 112 Space Heating Unit	9VAC5-80-720C	-	0.04 MMBtu/hr
HTR35	DOOR 113 Space Heating Unit	9VAC5-80-720C	-	0.04 MMBtu/hr
HTR36	DOOR 114 Space Heating Unit	9VAC5-80-720C	-	0.04 MMBtu/hr
HTR37	DOOR 115 Space Heating Unit	9VAC5-80-720C	-	0.04 MMBtu/hr
HTR38	DOOR 116 Space Heating Unit	9VAC5-80-720C	-	0.04 MMBtu/hr
HTR39	TCAR DOOR Space Heating Unit	9VAC5-80-720C	-	3.0 MMBtu/hr
HTR40	TCAR TRASH COMPACTOR Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
HTR41	ASRS HALLWAY Space Heating Unit	9VAC5-80-720C	-	0.10 MMBtu/hr
HTR42	ASRS HALLWAY Space Heating Unit	9VAC5-80-720C	-	0.10 MMBtu/hr
HTR45	RECEIVING Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR46	RECEIVING Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR47	DOOR 62 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR48	DOOR 63 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR49	DOOR 64 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR50	DOOR 65 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR51	DOOR 66 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR52	DOOR 67 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR53	DOOR 68 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR54	DOOR 69 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR55	DOOR 70 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR56	DOOR 71 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR57	DOOR 72 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR58	DOOR 73 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
HTR59	DOOR 74 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR60	DOOR 75 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR61	DOOR 76 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR62	DOOR 77 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR63	DOOR 78 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR64	DOOR 79 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR65	DOOR 80 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR66	DOOR 81 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR67	DOOR 82 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR68	DOOR 83 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR69	DOOR 84 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR70	DOOR 85 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR71	DOOR 86 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR72	DOOR 87 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR73	TRASH COMPACTOR Space Heating Unit	9VAC5-80-720C	-	0.25 MMBtu/hr
HTR74	SW Door Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
HTR79	DOOR 1 Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR81	DOOR 3 Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR83	DOOR 5 Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR85	DOOR 7 Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR87	DOOR 9 Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR89	DOOR 11 Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR91	B17 Space Heating Unit	9VAC5-80-720C	-	0.30 MMBtu/hr
HTR92	A17 Space Heating Unit	9VAC5-80-720C	-	0.30 MMBtu/hr
HTR93- HTR116	(24) Flow Lanes Space Heating Units	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR117- HTR121	(5) Audit Stall Space Heating Units	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR122- HTR126	(5) Methods Stall Space Heating Units	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR127	A3 Space Heating Unit	9VAC5-80-720C	-	0.30 MMBtu/hr
HTR128	A1 Space Heating Unit	9VAC5-80-720C	-	0.14 MMBtu/hr
HTR129	B1 Space Heating Unit	9VAC5-80-720C	-	0.30 MMBtu/hr
HTR130	B3 Space Heating Unit	9VAC5-80-720C	-	0.30 MMBtu/hr
HTR131	DOOR 31 Space Heating Unit	9VAC5-80-720C	-	0.90 MMBtu/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
HTR132	DOOR 33 Space Heating Unit	9VAC5-80-720C	-	0.90 MMBtu/hr
HTR133	DOOR 35 Space Heating Unit	9VAC5-80-720C	-	0.90 MMBtu/hr
HTR134	DOOR 37 Space Heating Unit	9VAC5-80-720C	-	0.90 MMBtu/hr
HTR135- HTR138	(4) OLD SKID Space Heating Units	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR139- HTR158	(20) Work Area Space Heating Units	9VAC5-80-720C	-	0.11 MMBtu/hr
HTR159- HTR179	(21) Misc Doors Space Heating Units	9VAC5-80-720C	-	0.13 MMBtu/hr
HTR180	Bay 1 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR181	Bay 1 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR182	Bay 2 Space Heating Unit	9VAC5-80-720C	-	0.08 MMBtu/hr
HTR183 HTR184- HTR187	Bay 2 Space Heating Unit (3) CCC Bldg Heating Units	9VAC5-80-720C 9VAC5-80-720C	- - -	0.08 MMBtu/hr 0.14 MMBtu/hr
HTR188- HTR190 HTR191- HTR199	(3) OLD DYNO area Heating Units (9) BIW area Heating Units	9VAC5-80-720C 9VAC5-80-720C	- -	0.3 MMBtu/hr 0.08 MMBtu/hr
HTR200- HTR217	(18) Assembly area Heating Units	9VAC5-80-720C	-	0.14 MMBtu/hr

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9VAC5-80-110.

Permit Shield & Inapplicable Requirements

122. **Permit Shield & Inapplicable Requirements** - Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
	None Identified	

Nothing in this permit shield shall alter the provisions of 40 CFR 303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to 40 CFR 114 of the federal Clean Air Act, (ii) the Board pursuant to 40 CFR 10.1-1314 or 40 CFR 10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to 40 CFR 10.1-1307.3 of the Virginia Air Pollution Control Law.
(9VAC5-80-110 and 9VAC5-80-140)

GENERAL CONDITIONS

123. **General Conditions - Federal Enforceability** - All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9VAC5-80-110)

124. **General Conditions - Permit Expiration** -

- a. This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9VAC5-80-80, the right of the facility to operate shall be terminated upon permit expiration.
- b. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
- c. If an applicant submits a timely and complete application for an initial permit or renewal under 9VAC5-80-80 F, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9VAC5 Chapter 80, until the Board takes final action on the application under 9VAC5-80-150.

- d. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9VAC5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9VAC5 Chapter 80.
- e. If an applicant submits a timely and complete application under section 9VAC5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9VAC5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
- f. The protection under subsections F 1 and F 5 (ii) of section 9VAC5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9VAC5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)

125. General Conditions - Recordkeeping and Reporting - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

- a. The date, place as defined in the permit, and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of such analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

(9VAC5-80-110)

126. General Conditions - Recordkeeping and Reporting - Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9VAC5-80-110)

127. General Conditions - Recordkeeping and Reporting - The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:

- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31;
- b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
 - (i) Exceedance of emissions limitations or operational restrictions;
 - (ii) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
 - (iii) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9VAC5-80-110)

128. General Conditions - Annual Compliance Certification - Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to 40 CFR 114(a)(3) and 40 CFR 504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:

- a. The time period included in the certification. The time period to be addressed is January 1 to December 31;
- b. The identification of each term or condition of the permit that is the basis of the certification;

- c. The compliance status;
- d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;
- e. Consistent with subsection 9VAC5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;
- f. Such other facts as the permit may require to determine the compliance status of the source; and,
- g. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3_APD_Permits@epa.gov

(9VAC5-80-110)

129. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Blue Ridge Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to Condition 125 of this permit. (9VAC5-80-110 F.2)
130. **General Conditions - Failure/Malfunction Reporting** - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall no later than four daytime business hours after the malfunction is discovered, notify the Blue Ridge Regional Office of such failure or malfunction and within 14 days provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Blue Ridge Regional Office. (9VAC5-80-110 and 9VAC5-20-180)
131. **General Conditions - Severability** - The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit. (9VAC5-80-110)

132. **General Conditions - Duty to Comply** - The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9VAC5-80-110)
133. **General Conditions - Need to Halt or Reduce Activity not a Defense** - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9VAC5-80-110)
134. **General Conditions - Permit Modification** - A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9VAC5-80-50, 9VAC5-80-1100, 9VAC5-80-1605, or 9VAC5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9VAC80-110, 9VAC5-80-190 and 9VAC5-80-260)
135. **General Conditions - Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.
(9VAC5-80-110)
136. **General Conditions - Duty to Submit Information** - The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9VAC5-80-110)
137. **General Conditions - Duty to Submit Information** - Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9VAC5-80-80 G.
(9VAC5-80-110)
138. **General Conditions - Duty to Pay Permit Fees** - The owner of any source for which a permit was issued under 9VAC5-80-50 through 9VAC5-80-300 shall pay annual emissions fees, as applicable, consistent with the requirements of 9VAC5-80-310 through 9VAC5-80-350 and annual permit maintenance fees as applicable, consistent with the requirements of 9VAC5-80-2310 through 9VAC5-80-2350.
(9VAC5-80-110, 9VAC5-80-310 et seq., and 9VAC5-80-2310 et seq.)

139. General Conditions - Fugitive Dust Emission Standards - During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

- a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
- b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;
- d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
- e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9VAC5-80-110 and 9VAC5-50-90)

140. General Conditions - Startup, Shutdown, and Malfunction - At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9VAC5-80-110 and 9VAC5-50-20 E)

141. General Conditions - Alternative Operating Scenarios - Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of

each such alternative scenario shall meet all applicable requirements including the requirements of 9VAC5 Chapter 80, Article 1.
(9VAC5-80-110)

142. **General Conditions - Inspection and Entry Requirements** - The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- d. Sample or monitor at reasonable times' substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9VAC5-80-110)

143. **General Conditions - Reopening For Cause** - The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9VAC5-80-80 F. The conditions for reopening a permit are as follows:

- a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9VAC5-80-110 D.

(9VAC5-80-110)

144. General Conditions - Permit Availability - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9VAC5-80-110 and 9VAC5-80-150)

145. General Conditions - Transfer of Permits

- a. No person shall transfer a permit from one location to another, unless authorized under 9VAC5-80-130, or from one piece of equipment to another.
- b. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9VAC5-80-200.
- c. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9VAC5-80-200.

(9VAC5-80-110 and 9VAC5-80-160)

146. General Conditions - Permit Revocation or Termination for Cause - A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9VAC5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.

(9VAC5-80-110, 9VAC5-80-190 C and 9VAC5-80-260)

147. General Conditions - Duty to Supplement or Correct Application - Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9VAC5-80-110 and 9VAC5-80-80 E)

148. General Conditions - Stratospheric Ozone Protection - If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established

by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F. (9VAC5-80-110 and 40 CFR Part 82)

149. **General Conditions - Asbestos Requirements** - The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150). (9VAC5-60-70 and 9VAC5-80-110)
150. **General Conditions - Accidental Release Prevention** - If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68. (9VAC5-80-110 and 40 CFR Part 68)
151. **General Conditions - Changes to Permits for Emissions Trading** - No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (9VAC5-80-110)
152. **General Conditions - Emissions Trading** - Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:
- a. All terms and conditions required under 9VAC5-80-110, except subsection N, shall be included to determine compliance.
 - b. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
 - c. The owner shall meet all applicable requirements including the requirements of 9VAC5-80-50 through 9VAC5-80-300.
- (9VAC5-80-110)

VOLVO COMPLIANCE ASSURANCE MONITORING (CAM) PLAN

**VOLVO GROUP NORTH AMERICA, LLC
4881 Cougar Trail Road
Dublin, VA 24084**

**Registration No. 20765
AIRS ID No. 51-155-0041**

REVISED on July 7, 2023

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2. CAB BC (8PE-004) AND CAB CC (9PE-001)
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1. INTRODUCTION

Pursuant to applicable 40 CFR 64 regulatory requirements to develop and submit a Compliance Assurance Monitoring (CAM) Plan, the following CAM Plan is applicable to volatile organic compound (VOC) and particulate matter (PM₁₀ / PM_{2.5}) emissions from Volvo Group North America, LLC (Volvo) located in Dublin, Virginia.

The development and format of the Volvo CAM Plan submittal is primarily based on the current version of EPA's Technical Guidance Document: Compliance Assurance Monitoring dated August 1998 and VA DEQ's Draft Chapter 9 Title V Manual – CAM dated June 2018.

The Volvo facility is a Title V major source due to permitted annual VOC emissions greater than 100 tpy. The facility is also a HAP Major Source due to the potential to emit over 10 tons for a single HAP or 25 tons per year of combined HAPs.

2. FACILITY DESCRIPTION

The facility is a highly integrated heavy truck manufacturing facility (SIC 3711). The plant's operations include the assembly of chassis on one chassis line, the assembly of cabs, the painting and coating of cabs, and, finally, the marriage of cabs to chassis. The facility has a capacity of approximately 116,300 skids per year in the Cab paint shop and 199,431 skids per year in the Plastics paint shop.

An amended Prevention of Significant Deterioration (PSD) permit was issued on January 25, 2023. A Title V permit was renewed on March 25, 2021, and last amended April 25, 2022.

This CAM plan is based on the aforementioned associated permits and requirements.

3. CAM APPLICABILITY DETERMINATION

The facility has emission units utilizing control devices to meet emission standards. Some of these emission units have pre-control emissions greater than 100% of the annual rate for the emission units to be classified as a major sources for VOC and/or PM.

This document provides the determination of the applicability of CAM for each PSEU following the criteria specified in Section 64.2 of the CAM rule and Table 1-1 in EPA's CAM guidance document. If the PSEU satisfies all of the applicability requirements listed in EPA's Table 1-1, then the PSEU is subject to CAM. Otherwise, Part 64 does not apply to the PSEU.

The detailed CAM applicability determination for each PSEU subject to CAM is included in Appendix A (VOC emissions) and Appendix B (PM emissions). The following is a summary of the PSEUs subject to CAM.

PSEUs Subject to CAM for VOCs

The following table contains the PSEUs and associated subunits that are subject to CAM:

PSEU	Sub-units
Cab Prime (5PE-002)	5PE-002A – Cab Prime Spray Booth
	5PE-002B – Flash
	5PE-002C – Oven
MT – Basecoat & Clearcoat (8PE-002)	8PE-002 – Multitone BC/CC Spray Booth
	8PE-002A – Flash
	8PE-002B – Oven
Cab Basecoat (8PE-004)	8PE-004 -- Cab Basecoat Spray Booth
	8PE-004A – Flash
Cab Clearcoat (9PE-001)	9PE-001 -- Cab Clearcoat Spray Booth
	9PE-001A – Flash
	9PE-001B -- Oven plus 10% of 8PE-004 Cab BC
Plastics Basecoat (8PE-003)	8PE-003 -- Plastics Basecoat Spray Booth
	8PE-003A – Flash
Plastics Clearcoat (9PE-002)	9PE-002-- Plastics Clearcoat Spray Booth
	9PE-002A -- Flash Zone
	9PE-002B -- Oven plus 10% of 8PE-003 Plastics BC

The VOC emissions from these PSEUs are controlled by a regenerative thermal oxidizer (RTO) to achieve a 95% reduction in VOC entering the control device with the exception of the spray and flash emissions from Cab BC (8PE-004) and MT (8PE-002). Those VOC emissions are routed through a combination concentrators and RTO to achieve an overall 88.5% reduction in VOC entering the control system.

To ensure 95% capture of VOC emission generated in the PSEUs, booth-to-building differential pressure (dP) monitoring is utilized to indicate whether the emission unit is being operated under slightly negative pressure. Where an RTO is installed, the operation of the PSEU under static pressure compared to building pressure improves the environmental control of the VOCs and PM by minimizing the loss of fugitive emissions from the emission unit. The slight negative dP achieves $\geq 95\%$ capture without

sacrificing quality of the paint surface finish.

The following are the VOC emissions generating activity combinations derived from the list above:

PSEU	VOC Controls	DRE
CAB BC (8PE-004) MT/BC/CC (8PE-002, - 002A)	Concentrators (CONC- 001, -002) ¹ RTO (8FBE-012)	88.5%
MT BC/CC (8PE- 002B)	RTO (8FBE-012)	95%
CAB CC (9PE-001) CAB Prime (5PE-002)	RTO (9FBE-011)	95%
Plastic BC (8PE-003) Plastic CC (9PE-002)	RTO (9FBE-010)	95%

¹The VOC containing vents generated from 8PE-004,-004A and 8PE-002,-002A are routed through the concentrators prior to the RTO. Other VOC containing vents from these emission units rout directly to the RTO.

PSEUs Subject to CAM for PM

The following table contains the PSEUs subject to CAM:

PSEU	Description
Chassis (1PE-001)	1PE-001 -- Chassis Spray Booth
Cab Basecoat (8PE-004)	8PE-004 -- Cab Basecoat Spray Booth
Cab Clearcoat (9PE-001)	9PE-001 -- Cab Clearcoat Spray Booth
Plastics Basecoat (8PE-003)	8PE-003 -- Plastics Basecoat Spray Booth
Plastics Clearcoat (9PE-002)	9PE-002 -- Plastics Clearcoat Spray Booth

The PM emissions from the Chassis (1PE-001) are controlled by a water curtain in the color coat spray booth and with dry filters in the primer zone to achieve 5 grains per 1,000 scf overall. PM emissions from the Chassis Paint Booth shall not exceed 8.5 tpy.

The PM emissions from the Cab Basecoat Spray Booth (8PE-004) and Cab Clearcoat Spray Booth (9PE-001) are controlled by a HEPA equivalent dry filter system to achieve 0.1 grains per 1,000 scf and annual emission limit of 0.1 tpy.

The PM emissions from the Plastics Basecoat Spray Booth (8PE-003) and Clearcoat Spray Booth (9PE-002) are controlled by a pre-coated dry filter system to achieve 0.1 grains per 1,000 scf and an annual emission limit of 0.3 tpy.

The following are the PM emissions generating activity combinations derived from the list above:

PSEU	PM Controls	DRE
Chassis (1PE-001)	Water Curtain	92%
Cab BC (8PE-004)	HEPA Equivalent Dry Filter System	99.97%
Cab CC (9PE-001)		
Plastic BC (8PE-003)	Pre-Coated Dry Filter System	99.97%
Plastic CC (9PE-002)		

PSEUs Not Subject to CAM

The following PSEUs based on a pre-control PM emission rate below 100 TPY are not subject to CAM.

- Cab Prime (5PE-002)
- Multitone BC/CC (8PE-002)

Remaining Emission Units Not Subject to CAM

The following emission units based on uncontrolled emission rate are not subject to CAM.

- Various Make-Up Air Units
- Boilers for Phosphate System (2FBE-003/-004)
- E -Coat Oven (3FBE-006)
- Prep/Sand Booth (6PE-001, -002, & -003)
- Special Projects/Repair (7PE-002)
- Final Inspection/Spot Repair (10PE-001/-002/-003/-004)
- CCC Building-Chassis Touch Up (13PE-001, 002 & 004)
- Boiler for Humidity Control (14FBE-001)
- Boiler for 5-stage Plastics Washer System (2PE-002)

- Smart Air Repair Booths 1 (7PE-003)
- Numerous insignificant sources

4. CAM SUBMITTAL DEADLINE REQUIREMENTS

All emission units that are applicable to CAM (§64.2(a)) are all also applicable to submittal deadlines per §64.5(b).

This revision is based on a Title V modification application submitted in April 2020, which was triggered by the amended PSD/NSR permit effective June 26, 2019.

5. SUMMARY OF SUBMITTAL REQUIREMENTS FOR CAM

Table 1-5 in EPA's CAM guidance document summarizes the Part 64 submittal requirements for CAM and it is repeated below.

TABLE 1-5. SUMMARY OF SUBMITTAL REQUIREMENTS FOR CAM	
Part 64 Referenc	Requirement
§ 64.4(a)	Information on indicators, indicator ranges or process by which indicators are to be established, and performance criteria
§ 64.4(b)	Justification for the proposed elements of the monitoring
§ 64.4(c)	Control device operating data recorded during performance test, supplemented by engineering assessments or manufacturer's recommendations to justify the proposed indicator range
§ 64.4(d)	Test plan and schedule for obtaining data, if performance test data are not available
§ 64.4(e)	Implementation plan, if monitoring requires installation, testing, or other activities prior to implementation

As noted in Table 1-5 above, §64.4(a) requires that the CAM submittal include information on indicators, indicator ranges or process by which indicators are to be established and performance criteria. Also, in Chapter 2 of the CAM guidance document, EPA requires background information, emissions unit identification, applicable regulations, emission limits, monitoring requirements and control technology descriptions. In addition, EPA provides guidance on how to organize information and data required by § 64.4(a). The information in Appendices A and B for each unit meets these requirements.

Part 64, EPA and VADEQ Guidance Background **§ 64.4(b) -- Submittal Requirements**

§ 64.4(b) requires justification for the proposed elements of the monitoring in the CAM Plan submittal and Section 2.3.1 of EPA's CAM guidance document (Page 2-17) provides the following clarification:

The basic concepts and principles used to design the State of Virginia CAM selection process were relied upon in designing this selection process. The selection process itself is not a requirement of Part 64, rather it is a suggested strategy for identifying appropriate monitoring approaches. The purpose of the selection process is ultimately to arrive at the most cost-effective monitoring approach that is consistent with the facility operations and provides sufficient data to indicate proper operation and maintenance of the control device such that there is a reasonable assurance of compliance with the emission limitations or standards.

To provide sufficient data related to the control devices and reasonable assurance of compliance with the emission standards, the selection process to determine the proposed monitoring approach was (1) initially based on adherence to CAM-related RTO and particulate monitoring requirements in the PSD/NSR permit, and (2) then these basic CAM-related monitoring requirements were applied in a consistent cost-effective manner.

§ 64.7(d) and 64.8 -- Response to excursions or exceedances and Quality Improvement Plans (QIP)

Corrective actions for each CAM unit are addressed using the following procedure as outlined in the NRV Plant ISO 14001 Environmental Management System (EMS).

Title V permit and CAM requirements are monitored daily and as stated, e-mails and text messages are distributed to key personnel anytime that LCL or UCL values are exceeded. Exceedances are recorded and monitored and if there is no immediate resolution of the issue through self-correcting mechanisms in the operating systems or with personnel intervention, a Corrective Action Request is generated as part of the Environmental Management System (EMS). The Level I procedure is outlined as follows:

The Audit Team (Environmental Department Staff in the case of Title V or CAM) will record any nonconformance finding identified during an internal audit in Corrective Action Request database. The ISO 14001 Standard or internal requirement citation(s) associated with the nonconformance finding should also be recorded.

The Corrective Action Requests database is maintained by the Environmental Department for automated tracking which replaces the summary logs.

The audit team member (Environmental Department staff in this case) discovering the finding will describe the nature of the nonconformance in the Corrective Action Request database and forward it to an accountable representative of the operational area. Typically, the Maintenance manager, Maintenance engineering, and supervisors in cases

related to the operation of an APCD. The department area representative is responsible to identify the root cause of the problem or failure, develop short term, long-term corrective and preventive actions, as appropriate in the Corrective Action Request (CAR) database.

The CAR is a tool to ensure that all key personnel are informed of the monitoring/APCD operational issue. The CAR prompts management attention to the operational issue, in addition to the systematic e-mail generated by the database and generally prompts the issuance of a maintenance work order request in the maintenance i-MAINT database.

CONTINUOUS ASSURANCE MONITORING PLAN
APPENDIX A
VOC Applicability Determinations

1. **CAB BC (8PE-004) and MT/BC/CC (8PE-002)**
2. **CAB Prime (5PE-002) and Cab CC (9PE-001)**
3. **PLASTICS BC (8PE-003) and PLASTICS CC (9PE-002)**

1. CAM APPLICABILITY DETERMINATION FOR CAB BC (8PE-004) and MT/BC/CC (8PE-002)

Evaluation of 40 CFR 64 Applicable Requirements (CAM) with Appropriate Facility Information for CAB BC (8PE-004) and MT/BC/CC (8PE-002)			
EPA CAM Guidance Table 1-1 with 40 CFR 64 Applicable Requirements		Facility and Permit Information	
Reference	Requirement	Reference	CAM Applicable?
§ 64.2(a)	Unit is located at major source that is required to obtain Part 70 or 71 permit	Title V Permit dated 6/9/2010; Title V Permit renewal application for the facility dated 5/22/2012; PSD/NSR permit dated 6/26/2019; Title V modification application submitted April 2020.	Yes
§ 64.2(a)(1)	Unit is subject to emission limitation or standard for the applicable pollutant	VOC limit (VOC reduction):	Yes
		8PE-004,-004A and 8PE-002,-002A	
		8PE-002B	95%
§ 64.2(a)(2)	Units use a control device to achieve compliance	RTO / Concentrators	88.5%
		RTO	95%
§ 64.2(a)(3)	Potential pre-control emissions of applicable pollutant from units are at least 100 percent of major source amount.	Pre-control VOC emissions*	Yes
		8PE-004	271.1 tpy
		8PE-002	124.03 tpy
§ 64.2(b)	Units are not otherwise exempt.	No applicable exemptions	Yes

*Based on Table 2 of the 6/26/2019 PSD Emissions Spreadsheet for VOC and PM emissions

**CAM Plan for VOC: CAB BC (8PE-004) and MT BC/CC (8PE-002) Emission Unit
 Concentrators (CONC-001,-002) and RTO (8FBE-012)**

	Indicator 1	Indicator 2	Indicator 3	Indicator 4
Indicator	Continuous Temperature Sensor RTO	Continuous Temperature Sensor CONC-001,-002	Burner Inspection	Booth-to-Building Pressure Monitor
Measurement Approach	The RTO is equipped with a continuous temperature sensor at the chamber exit to monitor, indicate, and record the chamber temperature.	CONC-001, 002 are equipped with a continuous temperature sensors at the inlet to monitor, indicate, and record the desorption gas inlet temperature.	Perform a monthly burner inspection	The spray zones of the spray booths are equipped with a continuous pressure sensor to monitor, indicate, and record the dP between the booth and the air in the building.
Indicator Range	The minimum RTO chamber temperature shall be maintained at or above the minimum temperature achieved at the most recent DEQ approved performance test that demonstrated compliance with this permit.	The minimum desorption gas inlet temperature shall be maintained at or above the minimum temperature achieved at the most recent DEQ approved performance test that demonstrated compliance with this permit.	NA	The maximum booth-to-building dP shall not exceed -0.0015 inches of water.
QIP Threshold	The QIP will be reviewed and modified (if necessary) should the RTO have excursions greater	The QIP will be reviewed and modified (if necessary) should the Concentrators have excursions	An excursion would be failure to conduct a monthly	A CAM excursion will be defined as a 1-hr average in which the booth-to-

	<p>than 5% of the production time in any semiannual reporting period.</p> <p>A CAM excursion is defined as a 1-hr average in which the chamber temperature falls below the minimum temperature achieved at the most recent DEQ approved performance test that demonstrated compliance with this permit.</p> <p>A permit exceedance is defined as a 3-hr average in which the chamber temperature falls below the minimum temperature achieved at the most recent DEQ approved performance test that demonstrated compliance with this permit.</p>	<p>greater than 5% of the production time in any semiannual reporting period.</p> <p>A CAM excursion is defined as a 1-hr average in which the inlet desorption gas temperature falls below the minimum temperature achieved at the most recent DEQ approved performance test that demonstrated compliance with this permit.</p> <p>A permit excursion is defined as a 3-hr average in which the inlet desorption gas temperature falls below the minimum temperature achieved at the most recent DEQ approved performance test that demonstrated compliance with this permit.</p>	<p>burner inspection.</p>	<p>building dP greater than - 0.0015 inches of water.</p> <p>A permit excursion will be defined as a 1-hr average in which the booth-to-building dP indicating positive pressure.</p>
<u>Performance Criteria:</u>				

Data Representativeness	Thermocouples are located in the RTO chamber as an integral part of the incinerator design. The thermocouples are connected to a chamber temperature controller.	Thermocouples are located in the concentrators are an integral part of the concentrator design. The thermocouples are connected to a gas inlet temperature controller.	NA	Proper operation of booth.
Verification of Operational Status	Proper temperature range is a direct indicator of proper VOC destruction.	Proper temperature range is a direct indicator of proper VOC desorption.	NA	NA
QA/QC Practices and Criteria	An instantaneous reading at one-minute intervals of measured temperature.	An instantaneous reading at one-minute intervals of measured temperature.	NA	An instantaneous reading at one-minute intervals of measured dP.
Monitoring Frequency	A digital temperature controller will be used to evaluate the readings of the temperature controller annually. If the digital temperature reading differs from the temperature reading of the controller by more than 0.75% of full scale, the temperature controller will be recalibrated with a multi-meter and calibrator to simulate the thermocouple	A digital temperature controller will be used to evaluate the readings of the temperature controller annually. If the digital temperature reading differs from the temperature reading of the controller by more than 0.75% of full scale, the temperature controller will be recalibrated with a multi-meter and calibrator to simulate the	NA	Follow specifications of meter including calibration procedures.

	readings at the controller.	thermocouple readings at the controller.		
Data Collection Procedure	Temperatures are monitored continuously. A one-hour average will be calculated based on 60 1-minute readings and the hourly averages will be maintained on-site.	Temperatures are monitored continuously. A one-hour average will be calculated based on 60 1-minute readings and the hourly averages will be maintained on-site.	NA	Temperatures are monitored continuously. A one-hour average will be calculated based on 60 1-minute readings and the hourly averages will be maintained on-site.

2. CAM APPLICABILITY DETERMINATION FOR CAB Prime (5PE-002) and Cab CC (9PE-001)

Evaluation of 40 CFR 64 Applicable Requirements (CAM) with Appropriate Facility Information for CAB Prime (5PE-002) and CAB CC (9PE-001)			
EPA CAM Guidance Table 1-1 with 40 CFR 64 Applicable Requirements		Facility and Permit Information	
Reference	Requirement	Reference	CAM Applicable?
§ 64.2(a)	Unit is located at major source that is required to obtain Part 70 or 71 permit	Title V Permit dated 6/9/2010; Title V Permit renewal application for the facility dated 5/22/2012; PSD/NSR permit dated 6/26/2019; Title V modification application submitted April 2020	Yes
§ 64.2(a)(1)	Unit is subject to emission limitation or standard for the applicable pollutant	VOC limit: 95% VOC reduction	Yes
§ 64.2(a)(2)	Units use a control device to achieve compliance	RTO	Yes
§ 64.2(a)(3)	Potential pre-control emissions of applicable pollutant from units are at least 100 percent of major source amount.	Pre-control VOC emissions* 5PE-002 113.96 tpy 9PE-001 139.22 tpy	Yes
§ 64.2(b)	Units are not otherwise exempt.	No applicable exemptions	Yes

*Based on Table 2 of the 6/26/2019 PSD Emissions Spreadsheet for VOC and PM emissions

**CAM Plan for VOC: CAB Prime (5PE-002) and CAB CC (9PE-001) Emission Unit
 RTO (9FBE-011)**

	Indicator 1	Indicator 2	Indicator 3
Indicator	Continuous Temperature Sensor	Burner Inspection	Booth-to-Building Pressure Monitor
Measurement Approach	The RTO is equipped with a continuous temperature sensor at the chamber exit to monitor, indicate, and record the chamber temperature.	Perform a monthly burner inspection	The spray zones of the spray booths are equipped with a continuous pressure sensor to monitor, indicate, and record the dP between the booth and the air in the building.
Indicator Range	The minimum RTO chamber temperature shall be maintained at or above the minimum temperature achieved at the most recent DEQ approved performance test that demonstrated compliance with this permit.	NA	The maximum booth-to-building dP shall not exceed -0.0015 inches of water.

QIP Threshold	<p>The QIP will be reviewed and modified (if necessary) should the RTO have excursions greater than 5% of the production time in any semi-annual reporting period.</p> <p>A CAM excursion is defined as a 1-hr average in which the chamber temperature falls below the minimum temperature achieved at the most recent DEQ approved performance test that demonstrated compliance with this permit.</p> <p>A permit exceedance is defined as a 3-hr average in which the chamber temperature falls below the minimum temperature achieved at the most recent DEQ approved performance test that demonstrated compliance.</p>	An excursion would be failure to conduct a monthly burner inspection.	<p>A CAM excursion will be defined as a 1-hr average for a booth-to-building dP reading greater than - 0.0015 inches of water.</p> <p>A permit excursion will be defined as a 1-hr average for a booth-to-building dP reading indicating positive pressure.</p>
Performance Criteria:			
Data Representativeness	Thermocouples are located in the RTO chamber as an integral part of the incinerator design. The thermocouples are connected to a chamber temperature controller.	NA	Proper operation of booth.
Verification of Operational Status	Proper temperature range is a direct indicator of proper VOC destruction.	NA	NA
QA/QC Practices and Criteria	An instantaneous reading at one-minute intervals of measured temperature.	NA	An instantaneous reading at one-minute intervals for measured dP.

Monitoring Frequency	A digital temperature controller will be used to evaluate the readings of the temperature controller annually. If the digital temperature reading differs from the temperature reading of the controller by more than 0.75% of full scale, the temperature controller will be recalibrated with a multi-meter and calibrator to simulate the thermocouple readings at the controller.	NA	Follow specifications of meter including calibration procedures.
Data Collection Procedure	Temperatures are monitored continuously. A one-hour average will be calculated based on 60 1-minute readings and the hourly averages will be maintained on-site.	NA	Temperatures are monitored continuously. A one-hour average will be calculated based on 60 1-minute readings and the hourly averages will be maintained on-site.

3. CAM APPLICABILITY DETERMINATION FOR PLASTICS BC (8PE-003) and PLASTICS CC (9PE-002)

Evaluation of 40 CFR 64 Applicable Requirements (CAM) with Appropriate Facility Information for Plastics BC (8PE-003) and Plastics CC (9PE-002)			
EPA CAM Guidance Table 1-1 with 40 CFR 64 Applicable Requirements		Facility and Permit Information	
Reference	Requirement	Reference	CAM Applicable
§ 64.2(a)	Unit is located at major source that is required to obtain Part 70 or 71 permit	Title V Permit dated 6/9/2010; Title V Permit renewal application for the facility dated 5/22/2012; PSD/NSR permit dated 11/17/2019; Title V modification application submitted April 2020	Yes
§ 64.2(a)(1)	Unit is subject to emission limitation or standard for the applicable pollutant	VOC limit: 95% VOC reduction	Yes
§ 64.2(a)(2)	Units use a control device to achieve compliance	RTO	Yes
§ 64.2(a)(3)	Potential pre-control emissions of applicable pollutant from units are at least 100 percent of major source amount.	Pre-control VOC emissions*	Yes
		8PE-003 263.85 tpy* 9PE-002 370.30 tpy*	
§ 64.2(b)	Units are not otherwise exempt.	No applicable exemptions	Yes

*Based on Table 2 of the PSD table for VOC and PM emissions

**CAM Plan for VOC: Plastics BC (8PE-003) and Plastics CC (9PE-002) Emission Unit
 RTO (9FBE-010)**

	Indicator 1	Indicator 2	Indicator 3
Indicator	Continuous Temperature Sensor	Burner Inspection	Booth-to-Building Pressure Monitor
Measurement Approach	The RTO is equipped with a continuous temperature sensor at the chamber exit to monitor, indicate, and record the chamber temperature.	Perform a monthly burner inspection	The spray zones of the spray booths are equipped with a continuous pressure sensor to monitor, indicate, and record the dP between the booth and the air in the building.
Indicator Range	The minimum RTO chamber temperature shall be maintained at or above the minimum temperature achieved at the most recent DEQ approved performance test that demonstrated compliance with this permit.	NA	The maximum booth-to-building dP shall not exceed -0.0015 inches of water.
QIP Threshold	<p>The QIP will be reviewed and modified (if necessary) should the RTO have excursions greater than 5% of the production time in any semi-annual reporting period.</p> <p>A CAM excursion is defined as a 1-hr average in which the chamber temperature falls below the minimum temperature achieved at the most recent DEQ approved performance test that demonstrated compliance with this permit.</p> <p>A permit exceedance is defined as a 3-hr average in which the chamber temperature falls below the minimum temperature achieved at the most recent DEQ approved performance test that demonstrated compliance with this permit.</p>	An excursion would be failure to conduct a monthly burner inspection.	<p>A CAM excursion will be defined as a 1-hr average for a booth-to-building dP reading greater than -0.0015 inches of water.</p> <p>A permit excursion will be defined as a 1-hr average for a booth-to-building dP reading indicating positive pressure.</p>

<u>Performance Criteria:</u>			
Data Representativeness	Thermocouples are located in the RTO chamber as an integral part of the incinerator design. The thermocouples are connected to a chamber temperature controller.	NA	Proper operation of booth.
Verification of Operational Status	Proper temperature range is a direct indicator of proper VOC destruction.	NA	NA
QA/QC Practices and Criteria	An instantaneous reading at one-minute intervals of measured temperature.	NA	An instantaneous reading at one-minute intervals of measured dP.
Monitoring Frequency	A digital temperature controller will be used to evaluate the readings of the temperature controller annually. If the digital temperature reading differs from the temperature reading of the controller by more than 0.75% of full scale, the temperature controller will be recalibrated with a multi-meter and calibrator to simulate the thermocouple readings at the controller.	NA	Follow specifications of meter including calibration procedures.
Data Collection Procedure	Temperatures are monitored continuously. A one-hour average will be calculated based on 60 1-minute readings and the hourly averages will be maintained on-site.	NA	Temperatures are monitored continuously. A one-hour average will be calculated based on 60 1-minute readings and the hourly averages will be maintained on-site.

APPENDIX B

PM Applicability Determinations

1. **CHASSIS PAINT BOOTH (1PE-001)**
2. **CAB BC (8PE-004) AND CAB CC (9PE-001)**
3. **PLASTICS BC (8PE-003) AND PLASTICS CC (9PE-002)**

1. CAM APPLICABILITY DETERMINATION FOR THE CHASSIS PAINT BOOTH (1PE-001)

Evaluation of 40 CFR 64 Applicable Requirements (CAM) with Appropriate Volvo Facility Information for the Chassis Paint Booth (1PE-001)			
EPA CAM Guidance Table 1-1 with 40 CFR 64 Applicable Requirements		Volvo Facility and Permit Information	
Reference	Requirement	Reference	CAM Applicable ?
§ 64.2(a)	Unit is located at major source that is required to obtain Part 70 or 71 permit	Title V Permit dated 6/9/2010; Title V Permit renewal application for the facility dated 5/22/2012; PSD/NSR permit dated 6/26/2019; Title V modification application submitted April 2020	Yes
§ 64.2(a)(1)	Unit is subject to emission limitation or standard for the applicable pollutant	PM limits: 1PE-001 5 grains per 1000 scf	Yes
§ 64.2(a)(2)	Unit uses a control device to achieve compliance.	Water Curtain Spray Booth with dry filters for primer zone	Yes
§ 64.2(a)(3)	Potential pre-control emissions of applicable pollutant from unit is at least 100 percent of major source amount.	Pre-control PM emissions: 1PE-001 106.3 tpy	Yes
§ 64.2(b)	Unit is not otherwise exempt.	No applicable exemptions	Yes

*Based on Table 2 of the 6/26/2019 PSD Emissions Spreadsheet for VOC and PM emissions

CAM Plan for the Chassis Paint Booth (1PE-001) Emission Unit

	Indicator 1	Indicator 2
Indicator	Pressure Drop Across Water Curtain Spray Booth	Spray Booth Inspection
Measurement Approach	The pressure drop is monitored with a differential pressure transducer.	Perform a monthly inspection of the water curtain and dry filters
Indicator Range	The lower control limit (LCL) for the differential pressure is 0.85 inches of water and the upper control limit (UCL) is 5.0 inches of water.	NA
QIP Threshold	The QIP will be reviewed and modified (if necessary) should the water spray booth have excursions greater than 5% of the production time in any semi-annual reporting period. An excursion is defined as a 1-hr average in which the differential pressure readings are outside of the LCL and UCL parameters.	An excursion would be failure to conduct a monthly inspection on the water curtain and dry filters.
<u>Performance Criteria:</u>		
Data Representativeness	The monitoring system consists of a differential pressure transducer which compares the pressure immediately upstream of the water curtain to the pressure directly downstream of the water curtain. Its minimum accuracy is ± 2 percent of the entire range.	NA
Verification of Operational Status	Database software application shows the readings and logs data	NA
QA/QC Practices and Criteria	Preventative maintenance and calibrations are performed annually. The accuracy of the differential pressure transducer is checked against known standard traceable to N.I.S.T.	NA
Monitoring Frequency and Data Collection Procedure	The signal from the transducer is sampled one time per minute. The one-minute readings are recorded and displayed. The PC then computes a 1-hr average using the 1-minute instantaneous readings and stores the one-hour average.	NA

2. CAM APPLICABILITY DETERMINATION FOR CAB BC (8PE-004) AND CAB CC (9PE-001)

Evaluation of 40 CFR 64 Applicable Requirements (CAM) with Appropriate Volvo Facility Information for the CAB BC (8PE-004) and CAB CC (9PE-001)			
EPA CAM Guidance Table 1-1 with 40 CFR 64 Applicable Requirements		Volvo Facility and Permit Information	
Reference	Requirement	Reference	CAM Applicable?
§ 64.2(a)	Unit is located at major source that is required to obtain Part 70 or 71 permit	Title V Permit dated 6/9/2010; Title V Permit renewal application for the facility dated 5/22/2012; PSD/NSR permit dated 11/17/2020; Title V mod application submitted April 2020	Yes
§ 64.2(a)(1)	Unit is subject to emission limitation or standard for the applicable pollutant	PM2.5 and PM10 limits: 8PE-004 and 9PE-001 0.1 grains per 1000 scf	Yes
§ 64.2(a)(2)	Unit uses a control device to achieve compliance.	HEPA-Equivalent filter w/pre-filters	Yes
§ 64.2(a)(3)	Potential pre-control emissions of applicable pollutant from unit is at least 100 percent of major source amount.	Pre-control PM10 and PM2.5 emissions: 8PE-004 298.3 tpy 9PE-001 343.3 tpy	Yes
§ 64.2(b)	Unit is not otherwise exempt.	No applicable exemptions	Yes

*Based on Table 2 of the 6/26/2019 PSD Emissions Spreadsheet for VOC and PM emissions

CAM Plan for the CAB BC (8PE-004) and Cab CC (9PE-001) Paint Booths Emission Units

	Indicator 1	Indicator 2	Indicator 3
Indicator	Average Pressure Drop Across e-Cube Filters	Pressure Drop Across RASH Filter	Spray Booth Inspection
Measurement Approach	The pressure drop is monitored with a dP transducers.		Perform monthly inspections of e-cubes
Indicator Range	The lower control limit (LCL) for the differential pressure is 0.5 inches of water and the upper control limit (UCL) is 4.0 inches of water.	The lower control limit (LCL) for the differential pressure is 0.2 inches of water and the upper control limit (UCL) is 2.0 inches of water.	NA
QIP Threshold	The QIP will be reviewed and modified (if necessary) should the e-Cube dry booth have excursions greater than 5% of the production time in any semi-annual reporting period. An excursion is defined as a 1-hr average in which the differential pressure readings are outside of the LCL and UCL parameters.		An excursion would be failure to conduct a monthly scrubber inspection.
Performance Criteria:			
Data Representativeness	The monitoring system consists of a differential pressure transducer, which compares the pressure immediately upstream of the water spray to the pressure directly downstream of the water spray. Its minimum accuracy is ±2 percent of the entire range.		NA
Verification of Operational Status	Database software application shows the readings and logs data		NA
QA/QC Practices and Criteria	Preventative maintenance and calibrations are performed annually. The accuracy of the differential pressure transducer is checked against known standard traceable to N.I.S.T		NA
Monitoring Frequency and Data Collection Procedure	The signal from the transducer is sampled one time per minute. The one-minute readings are recorded and displayed. The PC then computes a 1-hr average using the 1-minute instantaneous readings and stores the one-hour average.		NA

3. CAM APPLICABILITY DETERMINATION FOR PLASTICS BC (8PE-003) AND PLASTICS CC (9PE-002)

Evaluation of 40 CFR 64 Applicable Requirements (CAM) with Appropriate Volvo Facility Information for the Plastics BC (8PE-003) and Plastics CC (9PE-002)			
EPA CAM Guidance Table 1-1 with 40 CFR 64 Applicable Requirements		Volvo Facility and Permit Information	
Reference	Requirement	Reference	CAM Applicable ?
§ 64.2(a)	Unit is located at major source that is required to obtain Part 70 or 71 permit	Title V Permit dated 6/9/2010; Title V Permit renewal application for the facility dated 5/22/2012; PSD/NSR permit dated 11/17/2020; Title V modification application submitted April 2020	Yes
§ 64.2(a)(1)	Unit is subject to emission limitation or standard for the applicable pollutant	PM2.5 and PM10 limits: 8PE-003 and 9PE-002 0.1 grains per 1000 scf	Yes
§ 64.2(a)(2)	Unit uses a control device to achieve compliance.	Precoated Dry Filter System	Yes
§ 64.2(a)(3)	Potential pre-control emissions of applicable pollutant from unit is at least 100 percent of major source amount.	Pre-control PM2.5 and PM10 emissions: 8PE-003 275.6 tpy 9PE-002 275.6 tpy	Yes
§ 64.2(b)	Unit is not otherwise exempt.	No applicable exemptions	Yes

*Based on Table 2 of the 6/26/2019 PSD Emissions Spreadsheet for VOC and PM emissions

CAM Plan for the Plastics BC (8PE-003) and CC (9PE-002) Paint Booths Emission Units

	Indicator 1	Indicator 2	Indicator 3
Indicator	Average Pressure Drop Across the Pre-coated Dry Filter	Pressure Drop Across RASH Filter	Spray Booth Inspection
Measurement Approach	The pressure drop is monitored with dP transducers.		Perform monthly inspections of dry filters
Indicator Range	The (LCL) is 2.0 inches of water. The (UCL) is 8.0 inches of water.	The (LCL) is 1.2 inches of water. The (UCL) is 5.5 inches of water.	NA
QIP Threshold	The QIP will be reviewed and modified (if necessary) should the e-Cube dry booth have excursions greater than 5% of the production time in any semi-annual reporting period. An excursion is defined as a 1-hr average in which the dP readings are outside of the LCL or UCL parameters.		An excursion would be failure to conduct a monthly dry scrubber inspection.
Performance Criteria:			
Data Representativeness	The monitoring system consists of a dP transducer, which compares the pressure immediately upstream of the water spray to the pressure directly downstream of the water spray. Its minimum accuracy is ±2 percent of the entire range.		NA
Verification of Operational Status	Database software application shows the readings and logs data		NA
QA/QC Practices and Criteria	Preventative maintenance and calibrations are performed annually. The accuracy of the dP transducer is checked against known standard traceable to N.I.S.T		NA
Monitoring Frequency and Data Collection Procedure	The signal from the transducer is sampled one time per minute. The one-minute readings are recorded and displayed. The PC then computes a 1-hr average using the 1-minute instantaneous readings and stores the one-hour average.		NA